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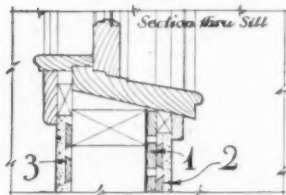
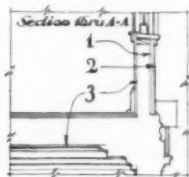


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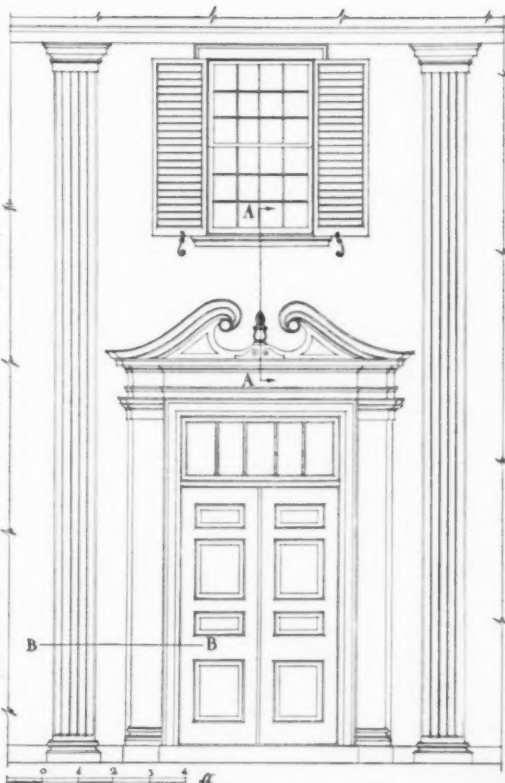
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THE ARCHITECTURAL RECORD



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Handwritten signature or initials.



MOTHER GOOSE PANEL IN GABLE OF CORNFLOWER COTTAGE, MODELED
IN CEMENT, IN PLACE—THE CARSON COLLEGE FOR ORPHAN
GIRLS, NEAR PHILADELPHIA. ALBERT W. KELSEY, ARCHITECT.

THE ARCHITECTURAL RECORD

VOLUME L



NUMBER I

JULY, 1921

The
CARSON COLLEGE *for* ORPHAN GIRLS
AT FLOURTOWN NEAR PHILADELPHIA
ALBERT W. KELSEY, ARCHITECT



By ARTHUR WILLIS COLTON

THE peculiarity of Carson College begins with the will of Mr. Carson, who left several millions to found a home for orphan girls, stipulating that no two children should be dressed alike. The stipulation would not have been important if it had not been taken as the germ of an idea that goes far if logically followed. It leads to the question: What is wrong with institutional handling of humanity, especially of children? Why are orphan asylums so dreadfully unfit for childhood?

It is not only that the dress is uniform. In fact, the great objection to orphans in uniform is not this superficial likeness to

each other, but that the uniform marks them as apart from other children. It keeps the facts always before their eyes, and the eyes of other children, and serves to make a stigma of misfortune.

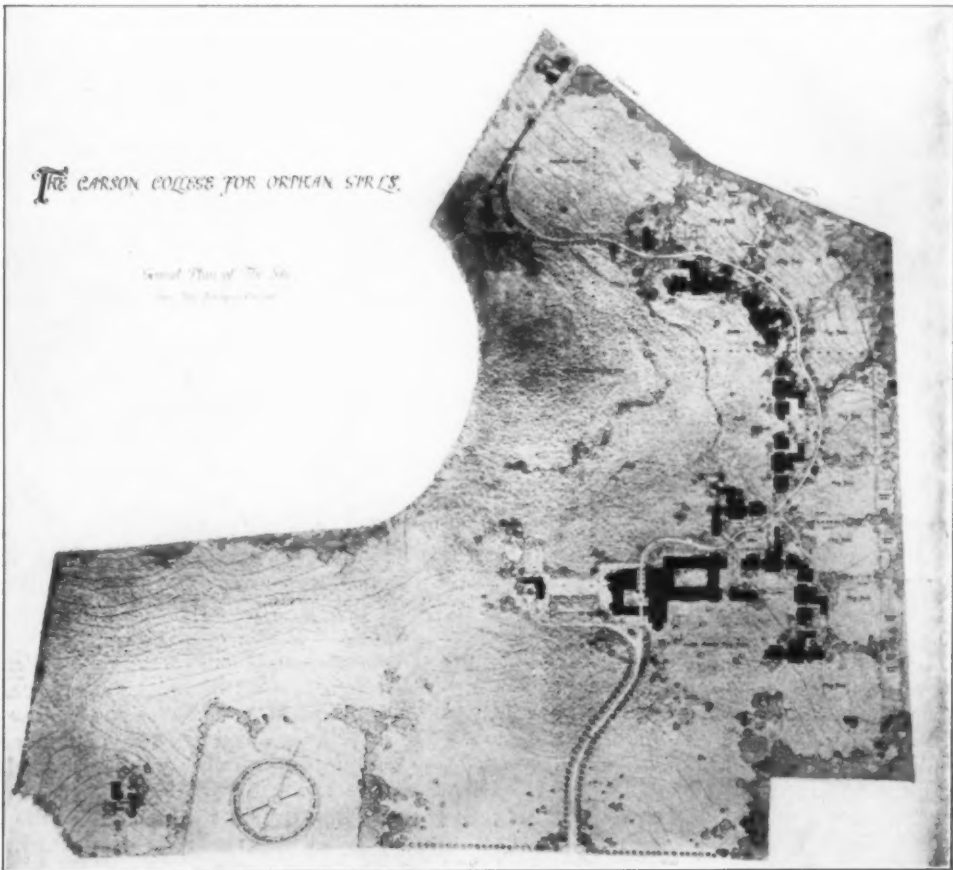
The next important step was taken when it was decided between the trustees and the architect that this large endowment should be directed to a qualitative instead of a quantitative purpose, which means that instead of trying to take care of as many orphans as possible they would try to give to a limited number the best advantages possible. It was the logical step. For all systems, bureaucracies, machine processes and routines grow out

of the attempt to handle facts or materials or people, of which the amount or number or multitude is too great, with the time and means at disposal, for a separate and peculiar attention to be given to each item. Uniformity or "one model" is the only road to quantity production at minimum cost, in an orphanage as in a Ford factory.

This then is the primary trouble. An institution naturally runs to mechanism, and this is a worse characteristic in an orphanage than in a school because a school is a supplement to, not a substitute for, a "home." The family group grows its own atmosphere around the individuals who compose it. It may not be a very good atmosphere, but it is always

human and peculiar. The best family life is the best background for childhood, and the institution which wishes to give the best atmosphere to the children in its care goes to the best family life for its models; there it finds something as varied and "queer" as humanity itself; but all interfused with sympathy and probably with humor on the side of the elders, and on the side of the children lit up with most unexpected imaginations.

Charles Dickens preached a sufficient sermon on the point in his "Hard Times." The dogmatic inspector in that notable Chapter I thought that carpets ought not to have roses woven in them, because roses do not grow on carpets and children should be shown only facts; whereas



THE CARSON COLLEGE FOR ORPHAN GIRLS, FLOURTOWN, NEAR PHILADELPHIA.
Albert W. Kelsey, Architect.

Cissy Jupe, or Girl No. 20, thought they should, because roses were pretty and she liked them. That we may not ourselves care for rose-garlanded carpets need not prevent our sympathizing with Cissy Jupe. That she was artistically early Victorian is unimportant. It is unimportant both to art and to childhood whether roses do or do not grow on carpets. The important thing is that a thing should be beautiful and that we should like it. Essentially, Cissy Jupe was right and the inspector wrong not only about childhood but about art. Above all, no girl should be called "Girl No. 20" or told that she must not say "I fancy."

At Carson College each building is named for a flower, and decorated with flower motifs. The architect calls it an "architectural anthology." It is an institutional revolt against Mr. Gradgrind and all his ways. Fancies, it wishes to imply, are as important for children as facts. It is probably better for a child to be imaginative than to be well-informed.

The Carson College estate comprises 116 acres. The long low hill to the south and the rolling country to the west give distant views. On the north, however, a rising hill limits the view, hides the village of Flourtown, and serves as a wind-shield in winter. Many young trees have



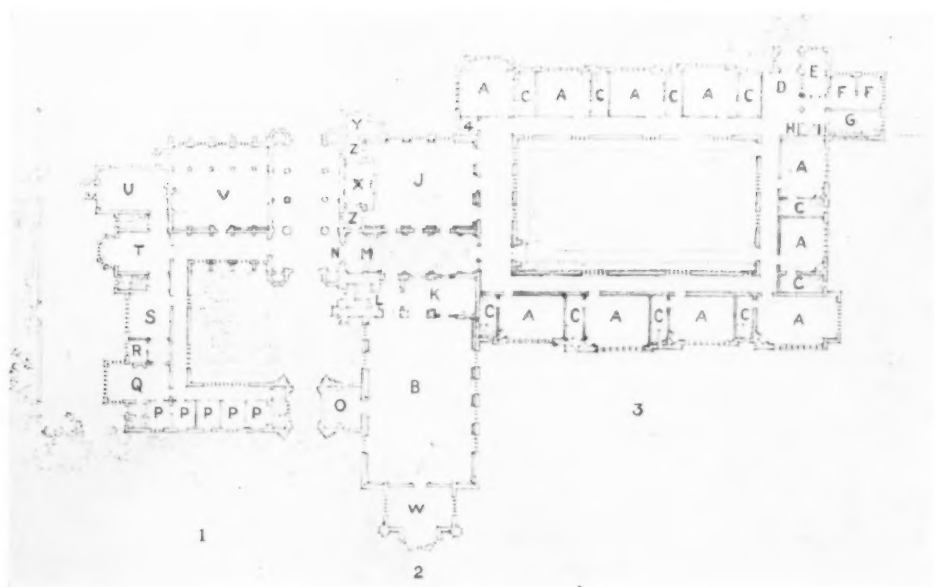
BIRD'S-EYE VIEW.

been planted on this hill, and here in the young forest are the Moon Well and the Star Well, two circular polished slabs, which, when the trees are grown, will lie sunken at the bottom of a dark forest circle. At present they are used as open air theatres and eventually they will be quite druidical sort of places. For the imaginative life of children, there is a promising subtlety and oddity in the idea.

In the little village composed of the Carson College buildings, it is noticeable that the roads are all so laid in curves that one building hides the next from view until the corner has been turned. Also, the



THE STEEL TOWER, A TEMPORARY OBSERVATION PLATFORM, MARKS THE SITE OF THE FUTURE CARSON MEMORIAL TOWER.



(1) ADMINISTRATION.

(2) GROUND FLOOR PLAN.

(3) SCHOOL.

A. Class Room.
B. Gymnasium.
C. Coat Room.
D. Regular Entrance for Children.
E. Office for Teachers.
F. Two Rest Rooms.
G. Children's Toilet.
H. Up to Play Room.
I. Down Passage.
J. Auditorium.
K. Control and Examination Room.
L. Up to Lockers, etc.
M. Down S.

N. Visitor's Entrance.
O. Apparatus Room.
P. Office.
Q. Superintendent's Private Office.
R. Stenographer.
S. Superintendent's Public Office.
T. Visitor's Waiting Room.
U. Teacher's Social Room.
V. Carson Memorial Room.
W. Special Exercises.
X. Platform.
Y. Toilet.
Z. Ante-Room.

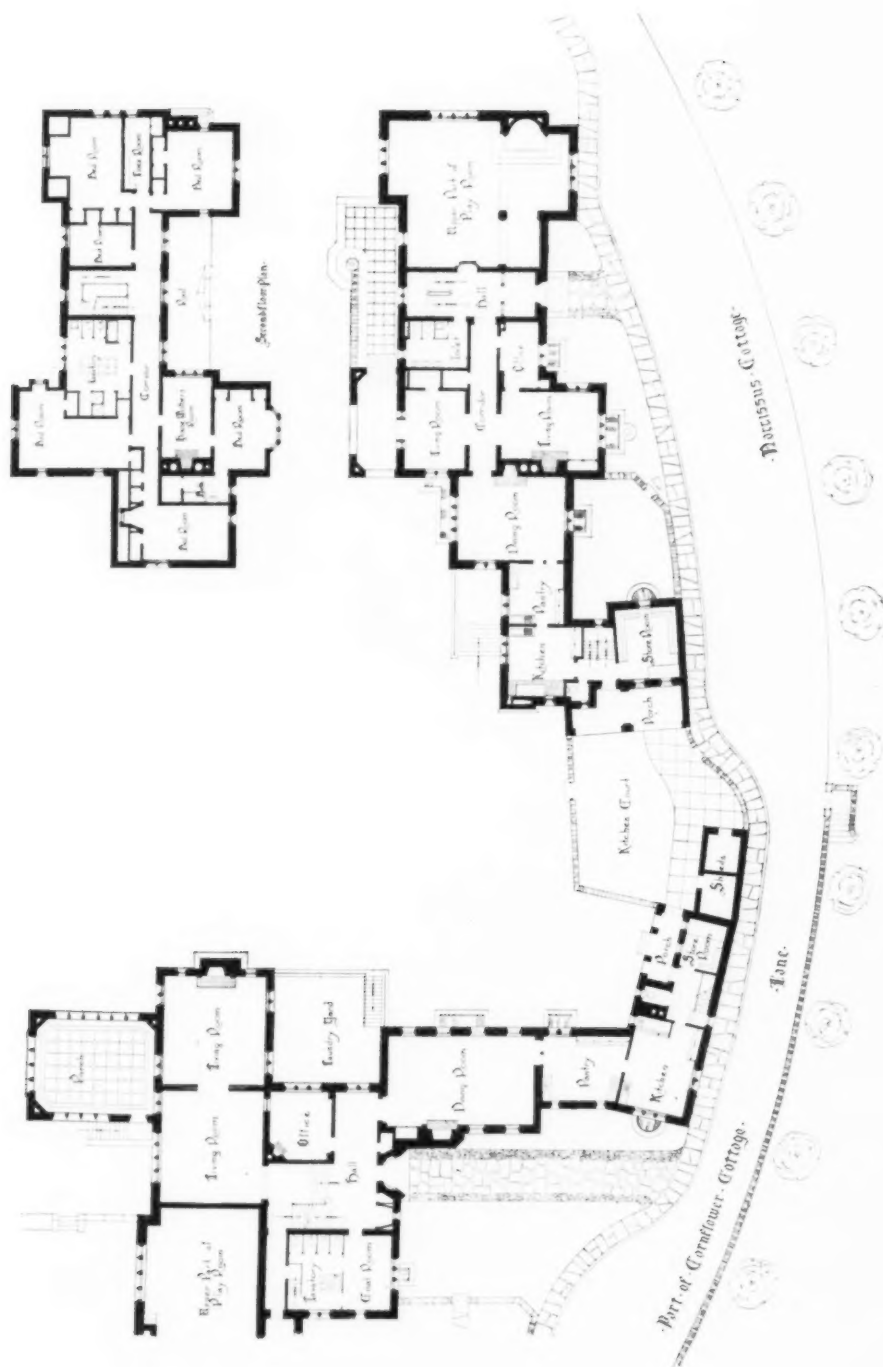


ADMINISTRATION.

SCHOOL.

MAIN BUILDING OF THE CARSON COLLEGE FOR ORPHAN GIRLS, NEAR
PHILADELPHIA, PA.

Albert W. Kelsey, Architect.



THE COTTAGES AT THE CARSON COLLEGE FOR ORPHAN GIRLS ARE CONNECTED IN PAIRS, WITH A SINGLE KITCHEN ENCLOSURE. THERE IS A COURT IN FRONT OF EACH COTTAGE OUT OF SIGHT OF OTHER COTTAGES.



PRIMROSE COTTAGE—THE CARSON COLLEGE FOR ORPHAN GIRLS.

rolling ground gives different levels to the houses. The Primrose Cottage is set so high that it is known to the children as Stork Hill, while the Cornflower Cottage is lower than the Narcissus House next it and is reached by a flight of steps. Many of the houses are connected by little paved paths, passing sometimes under stone archways, sometimes through woods. The small scale of the whole establishment is noticeable. It declares itself frankly a children's college. The carriage drives are narrow winding roadlets through which no automobile can speed. The place is full of little nooks and corners. The scale is not impractically small, but it is small enough to give the suggestion and the charm of childhood and its proportions. The road curves past a succession of irregular little buildings, with tiled roofs, of various colors. The roof of the Cornflower Cottage is blue, of the Narcissus House sand color. But these roof tiles vary in shade to get the effect of "broken color." Much of the woodwork is painted in strong reds and blues—on the Primrose Cottage in greens and

yellows. All this color is robust; and is foiled by panels of blank wall and by the unpainted wooden construction. The texture or graining of the wood, which is large and easily seen from a distance, seems to make the houses look even smaller than they are.

The houses are richly decorated, lavish not only of color but of carvings. The Mother Goose panel is under the eaves of the Cornflower Cottage, the Stork panels on the façade of the Primrose House, and the gilded Sunbaby is in the cloister of the Cornflower Cottage. Approaching from the east, the Cornflower, the Narcissus, the Primrose, the Thistle, each house has by its door, in stone or inlaid in terra cotta, the flower for which it is named, but varying in position and relation. Each of these flower insignia is used in decorative motif for the house to which it belongs—in running painted garlands under the eaves, and set like punctuation marks in carved panels.

There is another motif more literary and symbolical—a sort of five ages of woman—which begins with the Sunbaby



SIDE ENTRANCE TO PRIMROSE COTTAGE—
THE CARSON COLLEGE FOR ORPHAN GIRLS.



ONE OF THE GABLES OF PRIMROSE COTTAGE BEFORE THE CARVING
WAS DECORATED—THE CARSON COLLEGE FOR ORPHAN GIRLS.



STUCCO PANELS ON PRIMROSE COTTAGE—THE CARSON COLLEGE FOR ORPHAN GIRLS.



FORECOURT OF CORNFLOWER COTTAGE—THE CARSON COLLEGE FOR ORPHAN GIRLS,

and runs through three more panels—in cottages yet to be built—culminating in the Sun Woman, whose gilded statue will crown the Carson Memorial Tower, when the latter is finished. The tower has a base of local stone and rises sixty feet, becoming gradually more enriched with cut stone as it rises, brighter and lighter in color, lighter and more delicate and feminine in detail and design. The tall windows, where the walls begin to lighten, will reproduce in pierced design and color eight of the most famous Madonnas. The tracery above tapers up to garlands of flowers held by the Dawn Maiden, the Zenith Maiden, the Eventide Maiden, and the Maiden of the Night. Figures of children also appear in high color in the decorations, dressed in the uniforms of the world's orphan asylums historically most noted. The increasingly brilliant color will culminate in the gold of the Sun Woman. Gold has been sparingly used in decoration. It has only been used in the Sunbaby panel and the figure of the Sun Woman.

It may be suspected that the valuable

influence of some of this symbol, allegory and motif will not be effective directly on the children so much as indirectly through those in charge of them. The ideas or ideals or visions or dreams, under whose inspiration an institution is born, have a sad tendency to lose force and become faded or forgotten, as time goes on and the personnel changes. But the fixture of the ideal in the architecture and plan of the grounds should have a tendency to keep it vivid to the eyes of guardians and teachers, to keep alive this resistance to the "institutionalizing" of childhood. When the spirit of the place has been built into its architecture, cut into its stone and molded into its panels—these things do not change. This is not pretty sentimentalizing only. It is a far-sighted practical wisdom, which has seen the point where institutions break down in their relations with childhood, and met the issue squarely, with true American ingenuity, prodigal of invention and unsparing of expense.

Boys are often imaginative but seldom sentimental; girls, perhaps, more com-



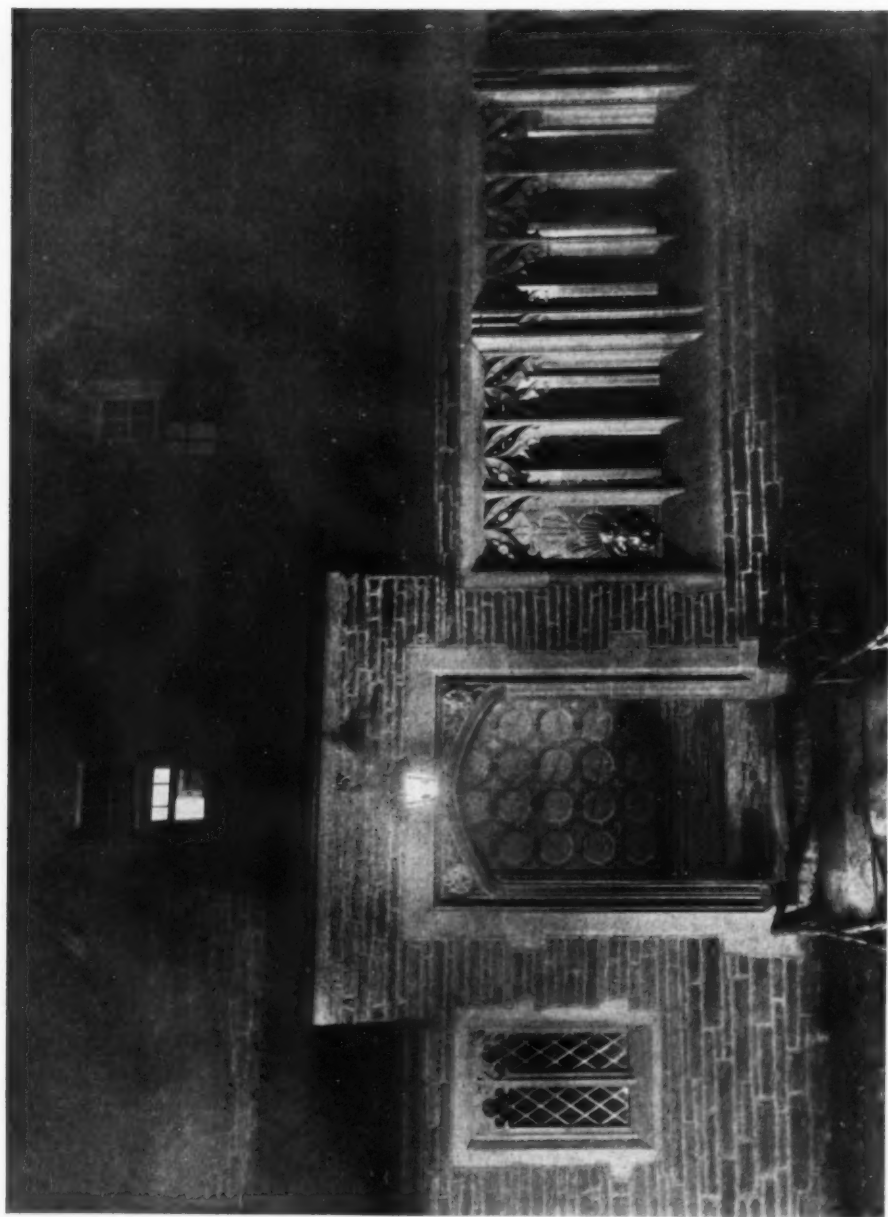
MOTHER GOOSE GABLE OF CORNFLOWER COTTAGE
—THE CARSON COLLEGE FOR ORPHAN GIRLS.



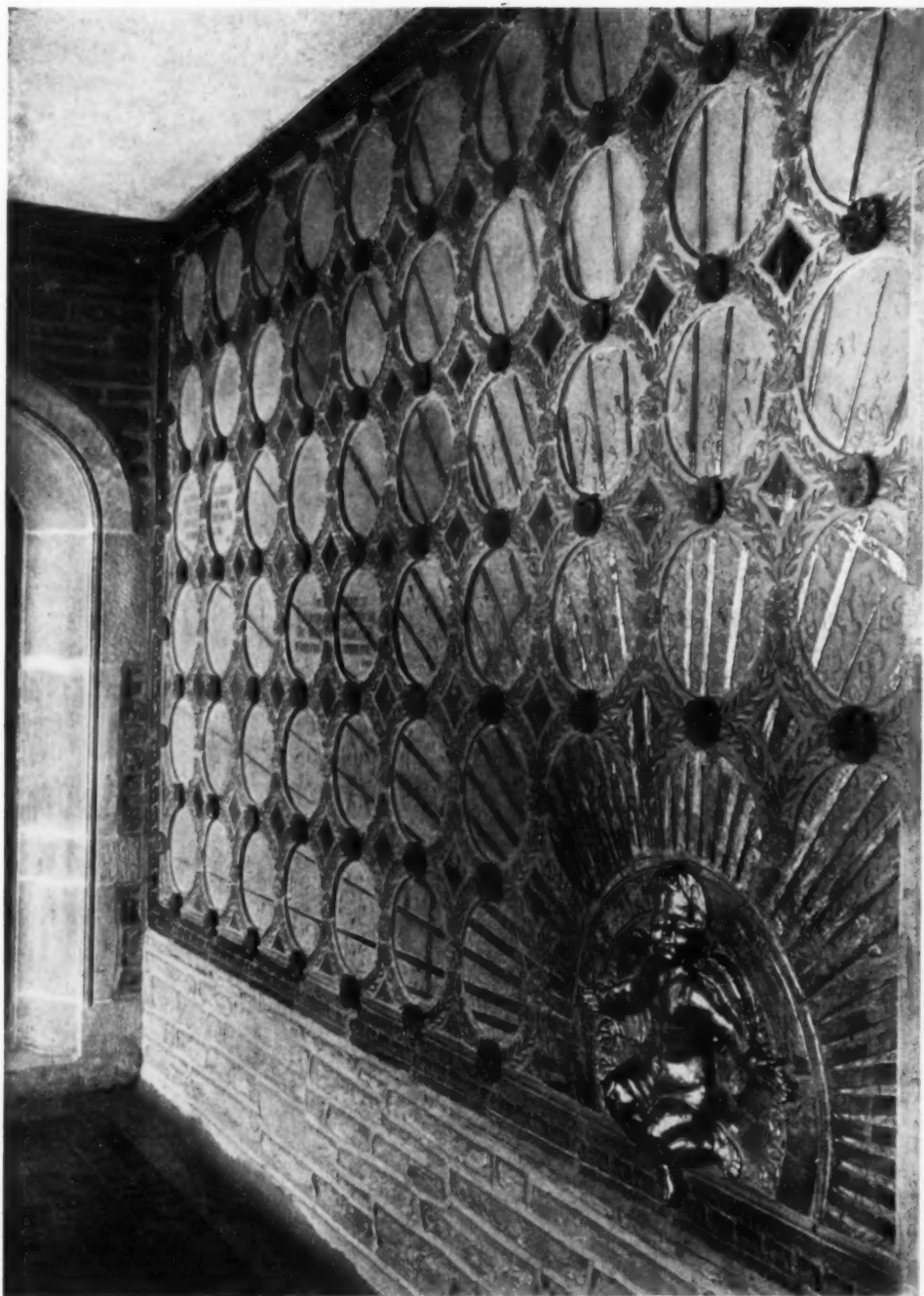
APPROACH TO THE MAIN ENTRANCE OF CORNFLOWER
COTTAGE—THE CARSON COLLEGE FOR ORPHAN GIRLS.



MAIN ENTRANCE TO CORNFLOWER COTTAGE
—THE CARSON COLLEGE FOR ORPHAN GIRLS.



NIGHT VIEW OF ENTRANCE TO CLOISTER OF CORNFLOWER
COTTAGE—THE CARSON COLLEGE FOR ORPHAN GIRLS.



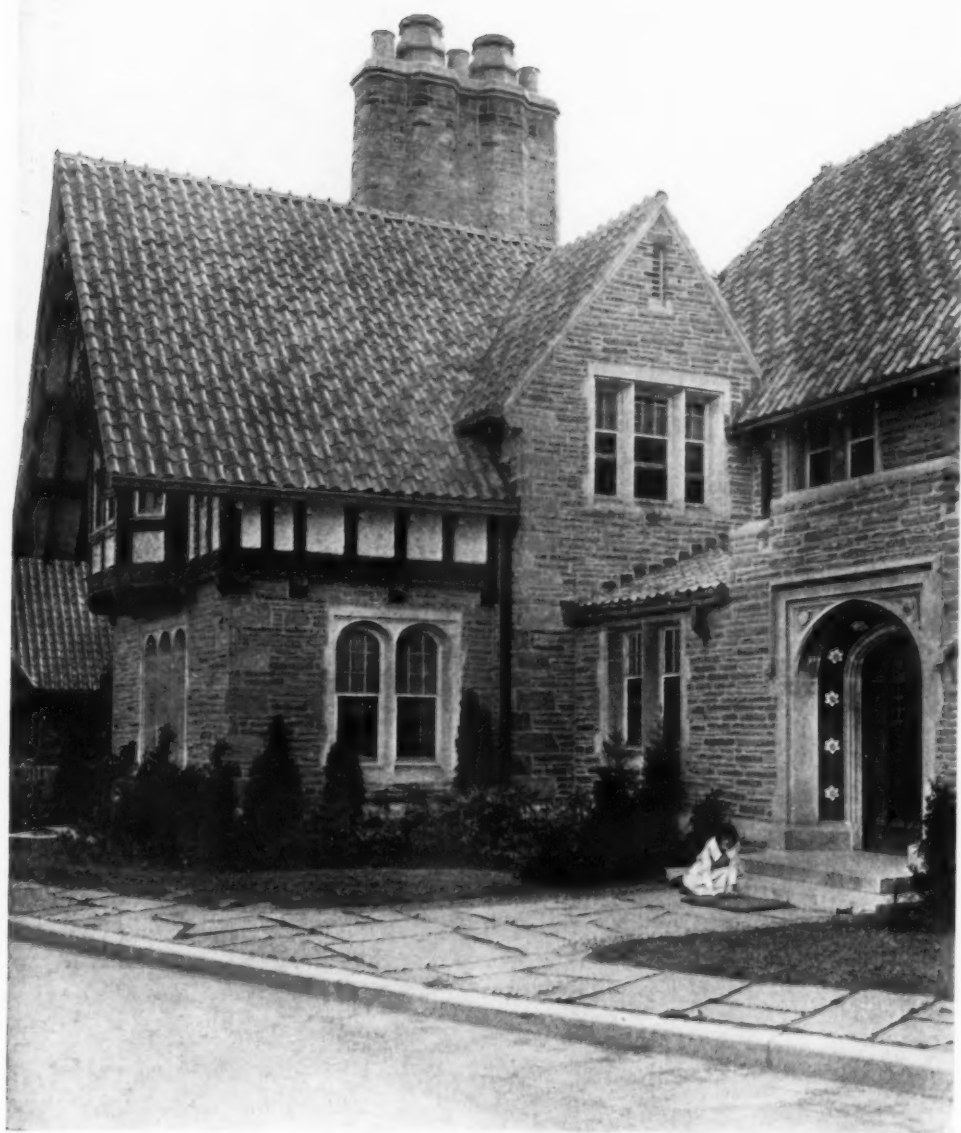
THE SUNBABY, IN CLOISTER OF CORNFLOWER COTTAGE—THE CARSON COLLEGE FOR ORPHAN GIRLS.



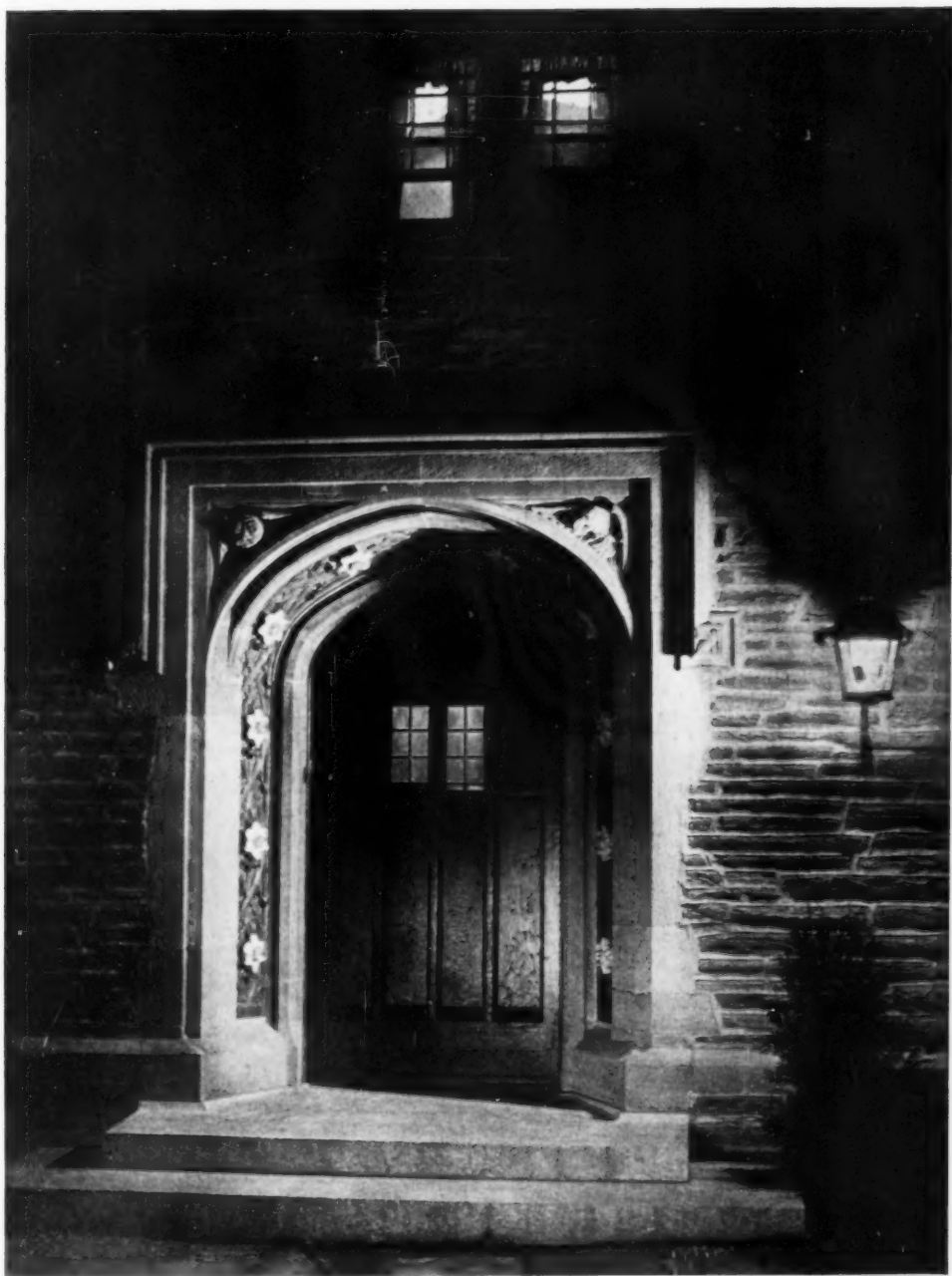
DINING ROOM MANTEL IN CORNFLOWER COTTAGE
—THE CARSON COLLEGE FOR ORPHAN GIRLS.



NARCISSUS COTTAGE THE CARSON
COLLEGE FOR ORPHAN GIRLS.



FORECOURT OF NARCISSUS COTTAGE—
THE CARSON COLLEGE FOR ORPHAN GIRLS.



NIGHT VIEW OF FRONT DOOR OF NARCISSUS COTTAGE, SHOWING EFFECT OF INDIRECT LIGHT IN DOORWAYS, EAVES, GABLES, ETC. THERE ARE NO STREET LAMPS ON THE COLLEGE GROUNDS.



ENTRANCE TO KITCHEN COURT BETWEEN NARCISSUS AND CORNFLOWER COTTAGES.



KITCHEN WING OF NARCISSUS COTTAGE—THE CARSON COLLEGE FOR ORPHAN GIRLS.



ONE OF THE GABLES OF NARCISSUS'S COTTAGE BEFORE THE ROOFS WERE TILED, SHOWING EXPERIMENTAL COLORING—THE CARSON COLLEGE FOR ORPHAN GIRLS.



THISTLE COTTAGE AND END OF GARAGE—THE CARSON COLLEGE FOR ORPHAN GIRLS.



ONE OF THE GABLES OF THISTLE COTTAGE—THE CARSON COLLEGE FOR ORPHAN GIRLS.

monly, are sentimental, but the word has here no derogation. Its derogative meaning has a literary history: the facile emotionalism—which a change of taste and period came to look on with more amusement than respect—was an emotionalism of the moods, not of children, but of their elders. It lies in the very nature of very young girls. It is not only right that they should have it, but it is part of the grace of their transient years.

If any hardened critic, then, is inclined to find Carson College architecturally sentimental, he should be reminded that the word's derogation depends wholly on its connection; that Carson College is more or less of a nursery; hence that architect and trustees are right in this point, and should be honored—the trustees for their courage and the architect for his extraordinary inventiveness. They were not building to suit sophisticated critics, but orphan girls. The right housing and nourishing of children's imagination is a much more difficult job than the housing and nourishment of their bodies, and at Carson it seems to have been done with rare insight and prescience, and regardless of cost. One may feel, transiently,

more dubious about the Sunbaby and Sun Woman than about the Mother Goose panel or the druidical forest wells (in respect to this insight), but one had best admit that there is probably a better knowledge of childhood at Carson than in *The Architectural Record*, and that here, too, the architect of those ideas is probably right.

The girls at Carson live in all respects, so far as possible, the life of normal children, in that they have school, housework, dancing classes and pet animals. The dancing classes are attended by the boys and girls of the neighboring village.

There have been homes for orphan children before in which dreary and drab institutionalism was kept out and the needs of childhood were beautifully served; but that happened where the place was relatively small and in charge of some radiating person or persons whose influence illuminated and protected it. Carson College is perhaps the first orphanage where this illumination and protection is embodied in its architecture, and hence—so far as may be done in that way—assured in perpetuity.



MANTELPiece ON SECOND FLOOR OF
"MOUNT PLEASANT," PHILADELPHIA, 1761.

✓ *The*
✓ EARLY ARCHITECTURE of PENNSYLVANIA
PART VIII - MANTELPieces ✓



By A LAWRENCE KOCHER

THUS far, in our survey of Pennsylvania architecture, we have been concerned almost exclusively with the exteriors of buildings, with the disposition of outward masses, or with the distinguishing character of such external features as cornices, windows and doors. The interiors are of no less importance for study. Many of the inner walls, with their splendid examples of wood panels, chimneypieces and stairways have been permitted to remain in their original integrity to our day, not only because of an appreciative care of generations in whose names the mansions and lesser dwellings have continued, but also because the inner fabric has been more free from meretricious alterations by the misguided restorer, acting under the changing fashion of a century.

The fireplace has played an important rôle in the history of domestic architecture from the time of the ancients. Because it forms a necessary function of supplying warmth and serves as a general gathering place of the household, it has properly been the subject for special care and attention on the part of the designer. The size of rooms has, in part, been determined by the space that can reasonably be heated by a single hearth, and the treatment of the rooms has been focused upon the elaboration of the chimneypiece. One can perceive a revised spacing in the present-day building practice with respect to alcoves and smaller rooms, which is undoubtedly a consequence of our practical if unesthetic system of radiator heating. The importance of the fireplace was fully appreciated in the century which developed our early American style, for, as Isaac Ware puts it, "no article in a room is more essential. The eye immediately

falls upon it on entering the room, and the place for sitting down is naturally near it. By this means it becomes the most prominent thing in the furnishing of a room."

Let us trace the development and the varied nature of the fireplace, from the beginnings of the colony and on to the period of the Greek Revival in the nineteenth century, in order to obtain a background of salient facts in the gradual evolution of the feature.

The fireplace, in America, was at first an exceedingly primitive affair, free from ornament and frankly purposed to give heat both for comfort and for cooking. It was of large dimensions, frequently from twelve to fifteen feet in width on the outside, and constructed of native limestone or brick. A lintel of oak or walnut, termed the "mantel-tree," usually spanned the top of the fire opening. The chimney of the eighteenth century was built of brick or stone, and in the rude temporary houses the use of wood plastered with mud-clay was not unknown. The large and primitive form of mantel was purely utilitarian and continued to be built in the Pennsylvania kitchen until recent times. We need not dwell upon the details of this ruder form. Our interest is rather in the mantel of lesser size which graced such rooms as the living, dining, and bed rooms.

The chimneypieces of Pennsylvania may be divided into four groups, each differing in the arrangement of parts and each varied in minor characteristics.

The subject of the first group may be termed the "mantel with overmantel," a creation of the early wood craftsman who devised the fireplace to be an integral part of a paneled wall enrichment, and to extend from floor to ceiling and to en-

compass the length or breadth of a room. During this epoch the dwellings were shaped by masterbuilders who were capable woodworkers and who applied their ingenuity to the elaboration of wood finish conceived for and built in a particular location. The results achieved by these early builders were highly commendable because of a satisfying unity. The examples that show this complete treatment of walls are impressive and dignified by sheer bulk and, at times, by an elegance of parts. For specimens of this mode we turn to the fashionable country residences or manor houses which continued to be built throughout the greater part of the eighteenth century. Whitby Hall (1754) and Mount Pleasant (1761) of Philadelphia, and the Hempfield-Wright House (1724) in Columbia, Pennsylvania, are treated in this manner.

The second typical form is exemplified in a smaller group of mantels—one which also displayed an enrichment of moldings about the fireplace opening and possessed the paneled and architecturally treated superstructure. The difference from the foregoing type is recognized by the fact that this form is not flanked by adjoining cupboards or paneled woodwork. The mantels from the Ephraim Blaine House in Carlisle and of the tavern in Hogestown represent the second division.

The third part of our classification includes the large number of low mantels which attained a popular favor by reason of a growth of economy in building about 1760. Wall-paper also obtained a vogue as a wall covering about this time.

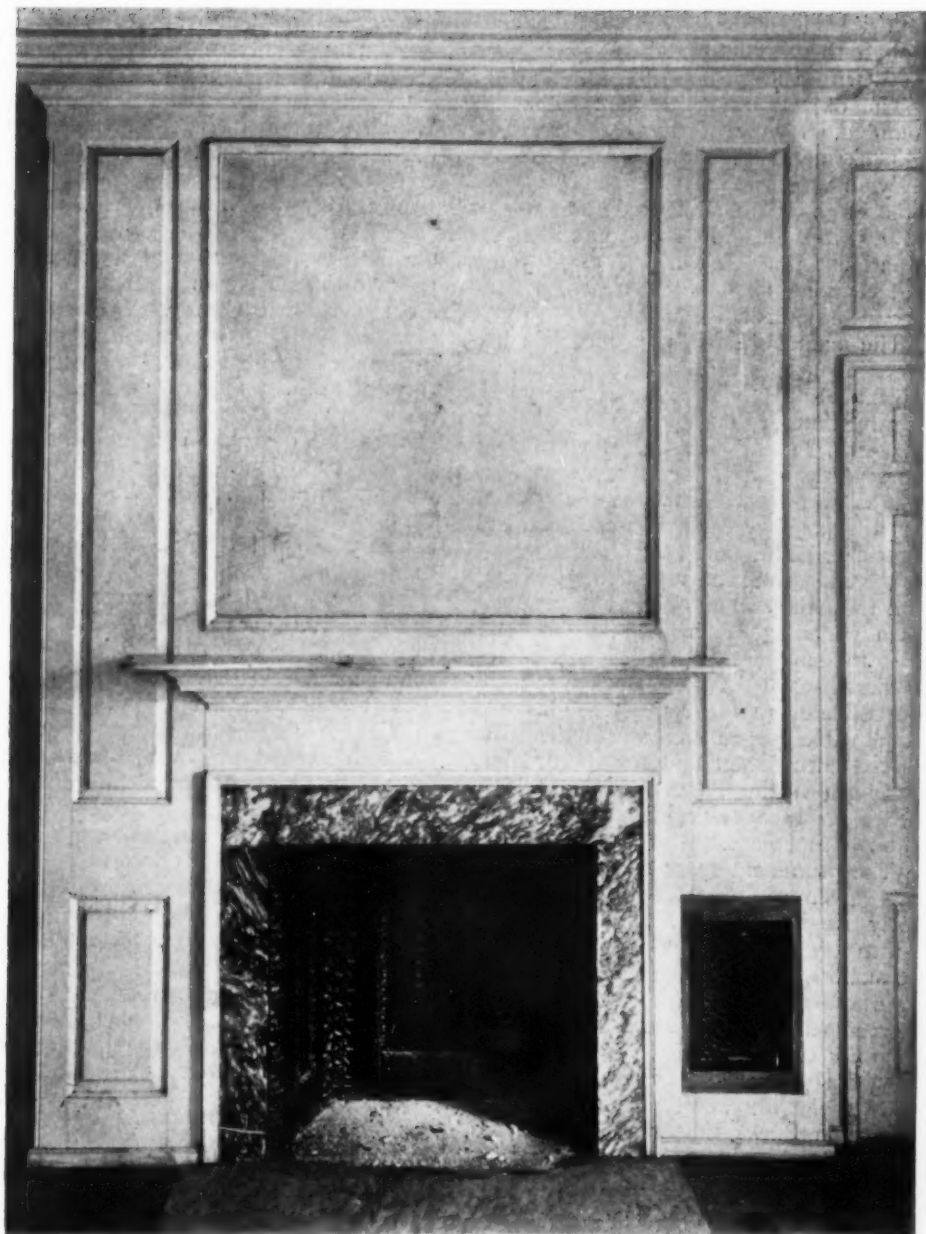
Another element worthy of our consideration was the potent influence of trade guilds which specialized in the production of individual mantels, usually of the small variety for greater ease of transport and installation.

The contraction in the size of the mantel and the elimination of the important architectural setting was, in a sense, a phase of the complete revolution that occurred in the building industry. As has been pointed out in an earlier account, houses were no longer built in their entirety by the house carpenter, but wood

finish had become a commodity which could be purchased as one would buy a piece of furniture.

The fourth form was similarly of moderate dimensions and grew out of the preceding lighter shapes. The origin of the mantels of this period was British and embodied a new spirit in architecture, dominated by the Adam Brothers, for which reason the fourth type was known as the "Adam Mantel." The form is characterized by an extensive use of composition ornament of a classical nature. The mantelpieces designed by Americans who followed the lead of the English fashion, made use of enrichment almost as an end in itself, featuring the festoon, the scroll, figures, grotesques and vases, on frieze and pilaster, wrought in the medium of stucco. The new spirit in domestic architecture adopted a slighter and more graceful membering. Moldings and details were less massive and in many ways were more formal. On the other hand, the adherence to strict rules of precedent was gradually relaxed and the movement proved to be the last flowering expression of the so-called "Colonial architecture." The groups of mantels in the Diller House in Lancaster and of the Beltzhoover House in Carlisle are characteristic.

Wood was the material chosen for mantels throughout the eighteenth century, and continued the popular choice until about 1825, when marble suddenly usurped its place. The Colonial mantel was fashioned of wood for reasons of economy and expediency. Both pine and oak were readily obtained from the forests of the province. The perishable nature of wood did not deter the builders in their selection. It did, however, influence the design, in that it became the custom to surround the fireplace opening with marble, brick, or square tiles. Criticism has been made of the prevailing use of wood and of the introduction of brick or marble about the fire opening and thus setting back the architrave and pilasters. This "architectural fault" resides in an apprehensive sense of the inappropriateness in the use of inflamma-



MANTELPiece ON SECOND FLOOR OF GOWEN
HOUSE, "MOUNT AIRY," PHILADELPHIA.
EXAMPLE OF MANTEL WITH OVERMANTEL.

ble material surrounding a fireplace, even though the flat intermediate space was faced with a fireproof material.

The objection would seem to be ill-founded, in view of the very nature of the "Colonial style," which was admittedly an outgrowth of English prototypes. The English architects did not appear adverse to the use of wood in an identical situation from the time of Inigo Jones and Grinling Gibbons to the end of the Georgian period.

The mantel shelf has an uncertain history. It appeared on occasions from the advent of the eighteenth century. It occurred but seldom upon the lofty chimney-piece, but before the Revolution it became an inseparable part of the low mantel and was selected as the conventional repository for bric-a-brac and candlesticks. The candlesticks were placed at the ends, over the supporting pilasters, and frequently an emphasis was produced by a widening of the shelf at the ends over the supports. An additional change occurred when the shelf clock was introduced, later in the century. This was responsible for an increase in the width of the entire shelf and for the breaking forward of the center of the shelf in order to give sufficient space for the popular timepiece.

The prominent space above the mantel was given a special significance from early English history, and we look instinctively to this place for ancestral mementos, such as the family portrait, or coat of arms, or for some highly esteemed painting by Benjamin West, Peale or other Colonial artist. General Green placed a picture of the rising sun on a panel over the mantel of the Merrick House in Bucks County. Many an impressive early portrait has been preserved to our time on account of the traditional custom of displaying the portraits of progenitors in this fitting architectural setting.

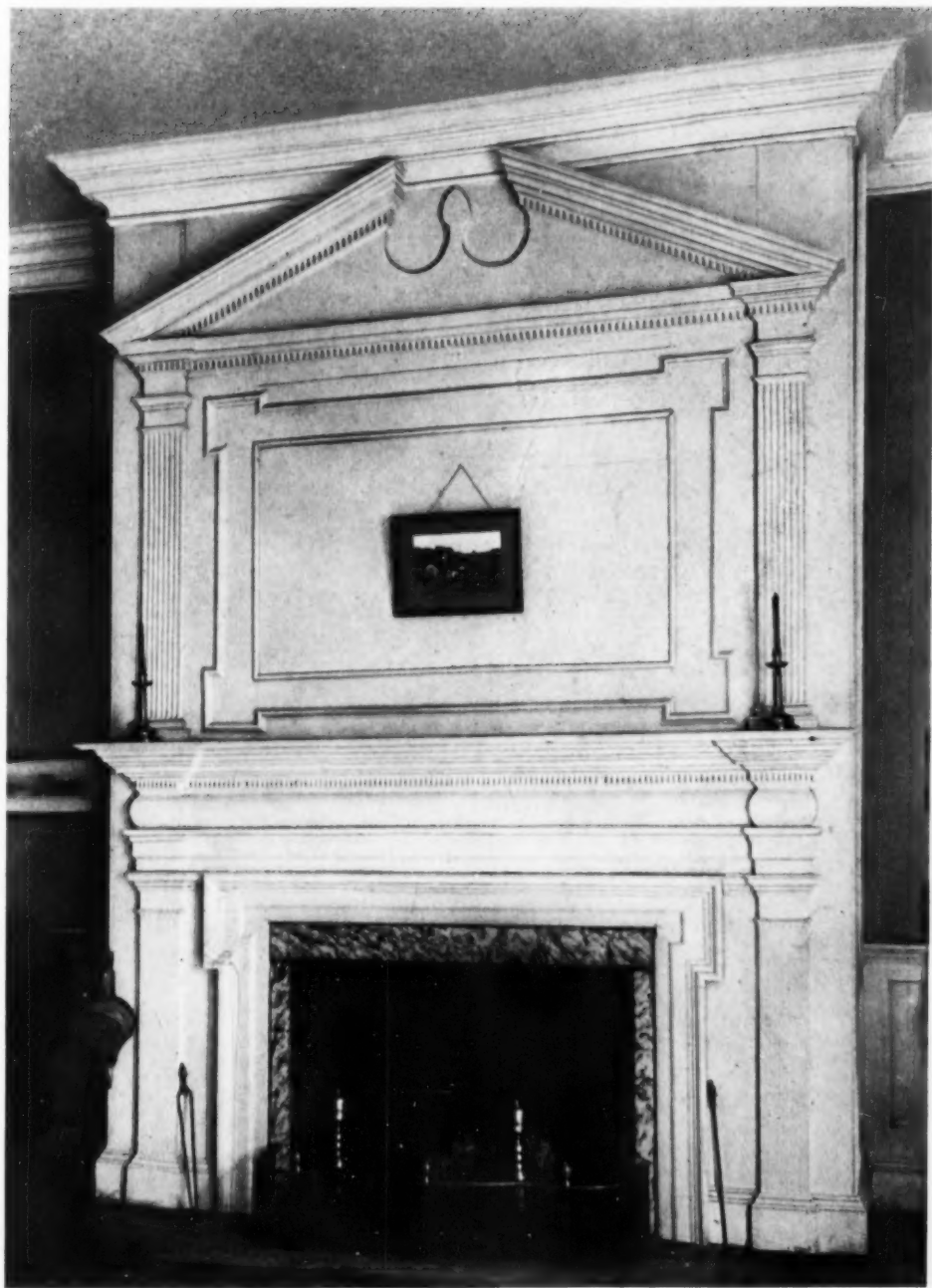
The Quakers and the Puritan-minded adherents of various religious sects frowned upon all forms of art and ancestry as partaking of a worldly vanity and wanton pretense. In consequence of

this mental attitude the lofty mantel was never general.

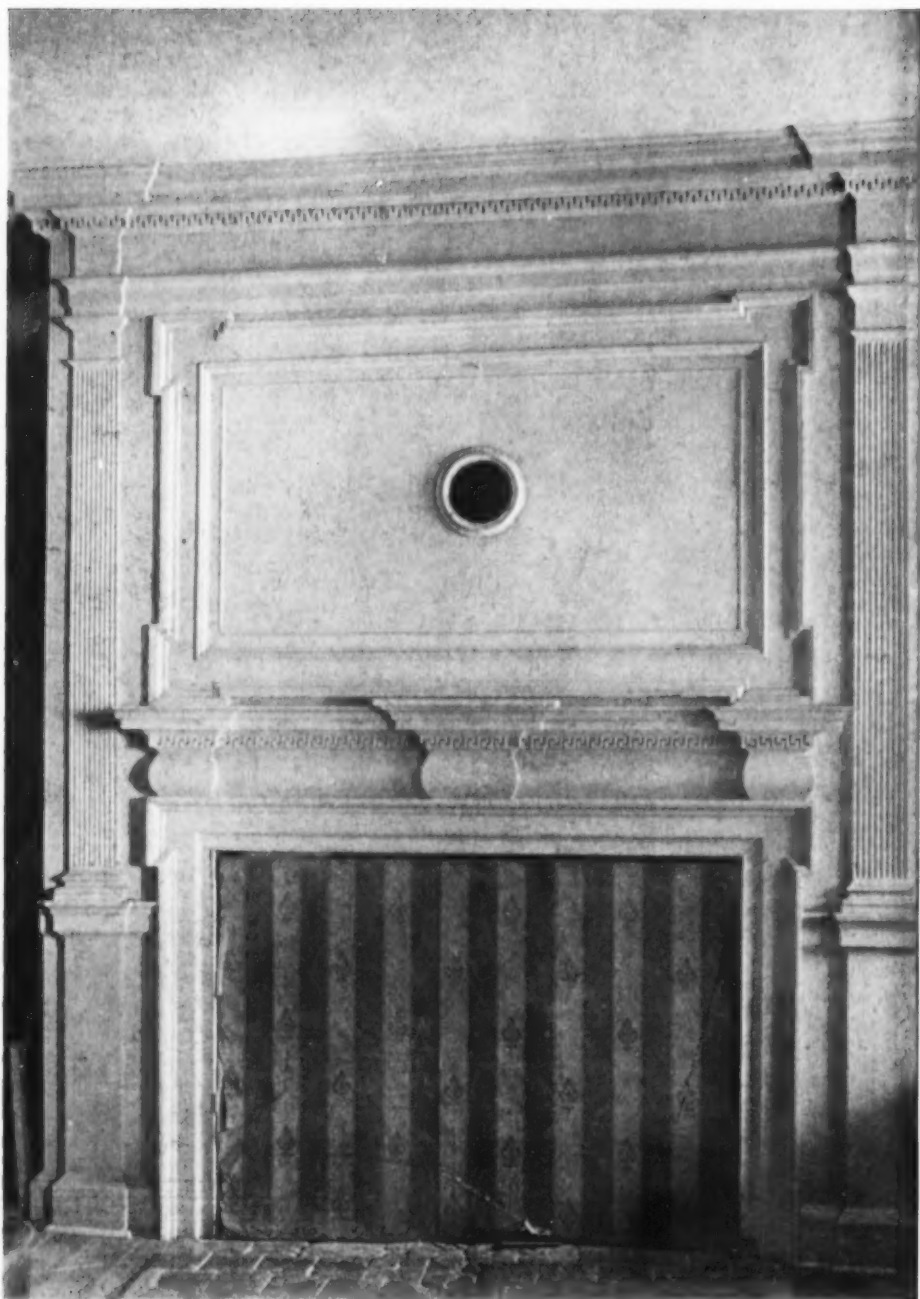
We can, however, easily overstress the influence that the religious precepts of William Penn and his followers had upon the local architecture. The Quaker tendency to favor the austere and simple was scarcely woven into the finished fabric of domestic architecture. Certainly the dwelling did not stand apart and appear "different" from the houses of the more worldly neighbors. The traditions of home building were too firmly rooted in the past to be readily swayed by the rules of faith. In the case of the meeting house we do perceive a difference, because there was not the same continuous line of precedent. The meeting house was an innovation, a new kind of structure, made to conform to the ritual of a newly evolved religion and for which there were no prototypes.

It may be said with assurance that no colony in America displayed a more unquestionable good taste in the design of mantels than did Pennsylvania. It would appear that the mantelpieces were examples of architectural art of a high order, designed by men of taste and capability who understood their craft and who were skilful enough to bring wood craftsmanship to the highest stage of development attained in America. It was also strangely true, however, that the citizens of this colony were chiefly responsible for the decline of the mantel, for it was here, and not in New England, that the well-intended improvements in heating were made. Christopher Sauer of Germantown and Benjamin Franklin were both concerned in the utilitarian changes which were destined to make the fireplace unnecessary.

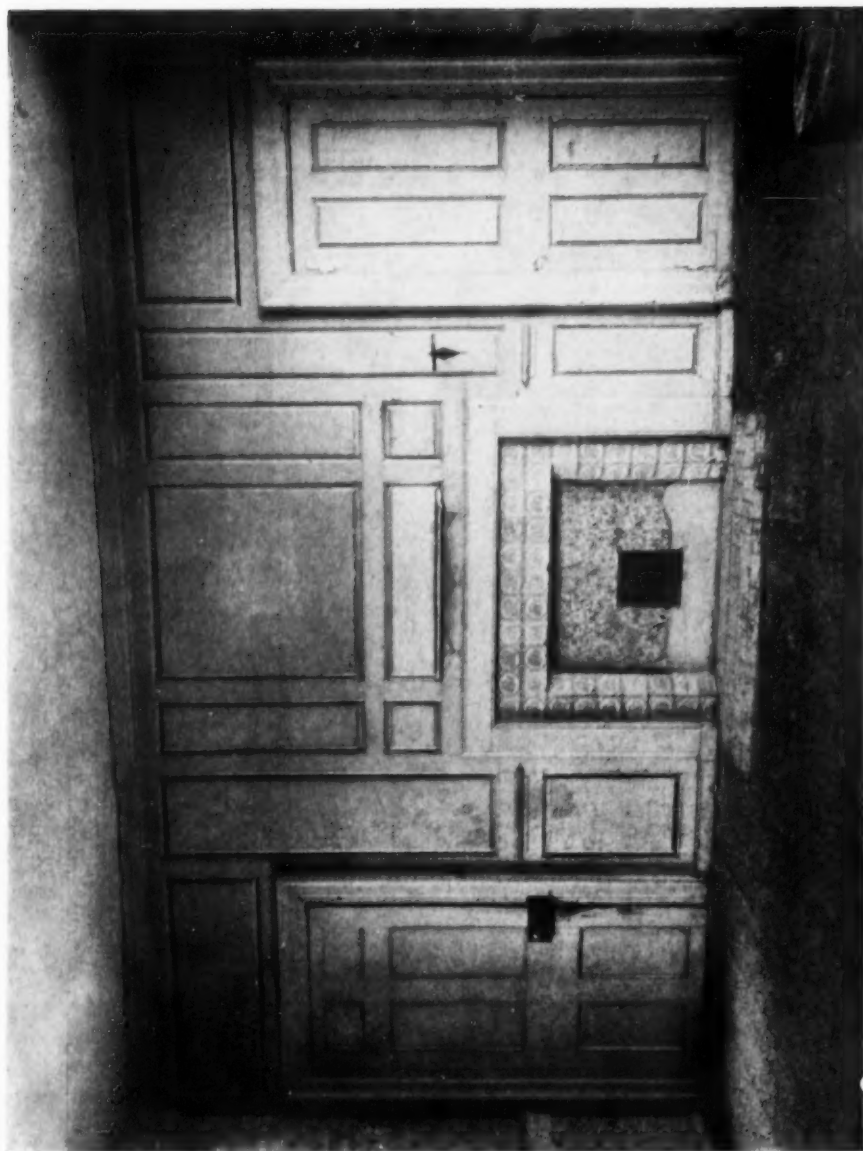
The first improvements in the art of heating houses were made near the middle of the eighteenth century. We associate the name of Christopher Sauer, the printer, with the six and the ten plate stove. This stove was square or of box form, and was designed to be set in the side or jamb of the kitchen fireplace. As a conservator of fuel it proved phenomenal, but is said to have warmed the



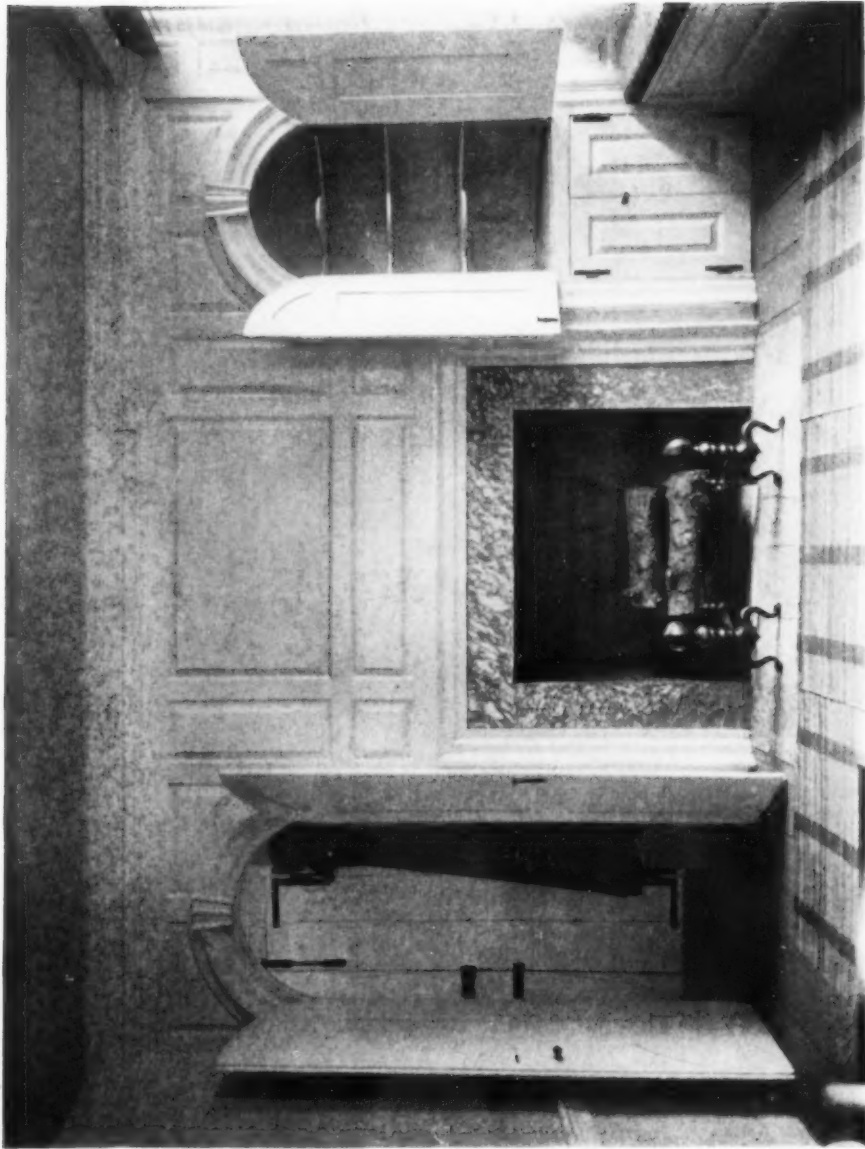
THE STATE BEDCHAMBER MANTELPIECE ON SECOND FLOOR
OF EPHRAIM BLAINE HOUSE, CARLISLE, PA., 1792-97.
EXAMPLE OF HIGH MANTEL WITHOUT ADJOINING WOODWORK.



MANTELPiece IN HOGESTOWN
TAVERN, NEAR CARLISLE, PA.



WALL TREATMENT IN WHITBY
HALL, PHILADELPHIA, 1754.



DINING ROOM WALL TREATMENT OF WASHINGTON'S HEADQUARTERS AT VALLEY FORGE, 1742-52.



BEDROOM OF WASHINGTON'S HEAD-
QUARTERS AT VALLEY FORGE.



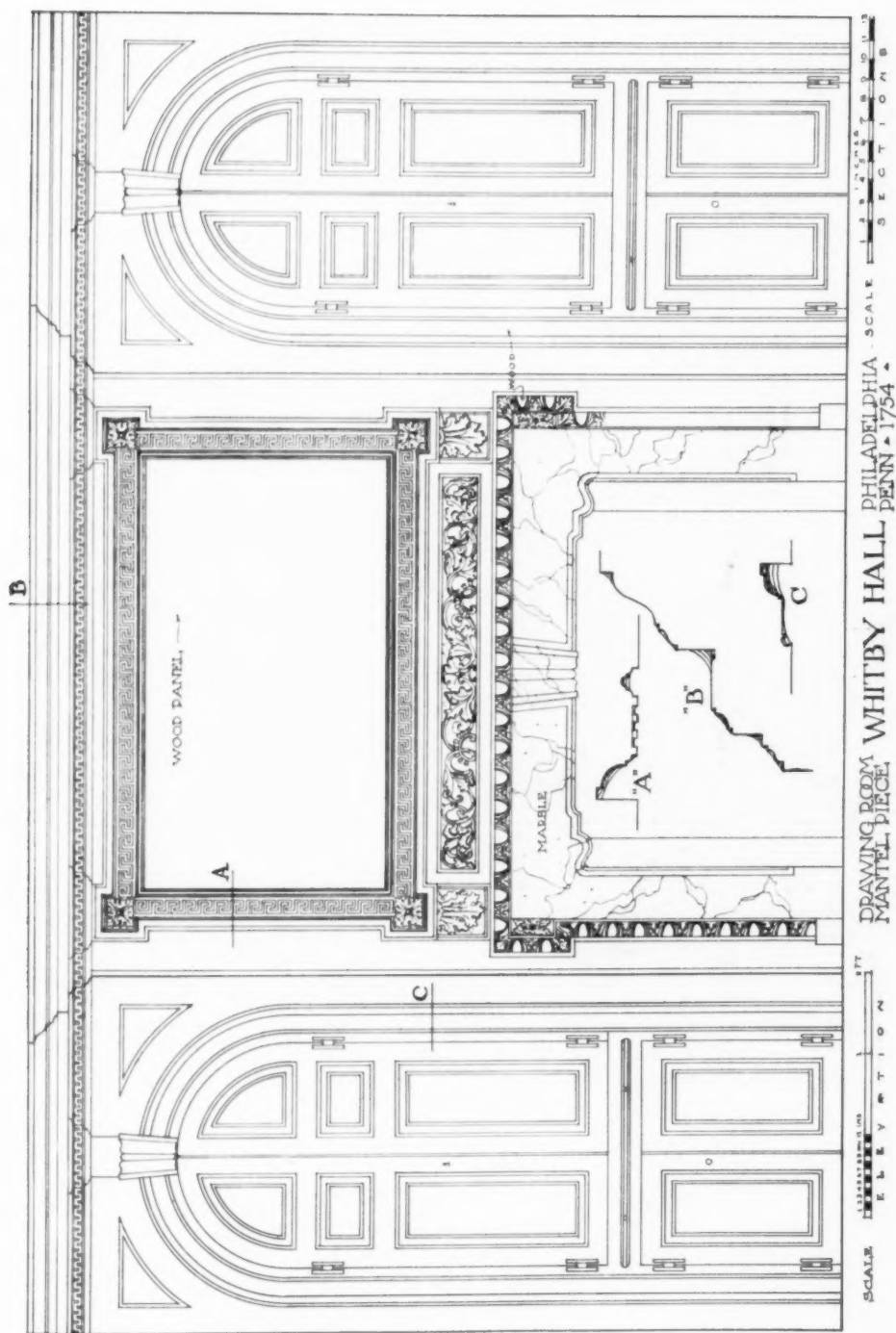
MANTELPiece OF BOKLEN
HOUSE, PHILADELPHIA.



MANTELPiece OF HOUSE IN MERCERSBURG, PA. BRICK-
WORK SURROUNDING FIREPLACE OPENING IS MODERN.

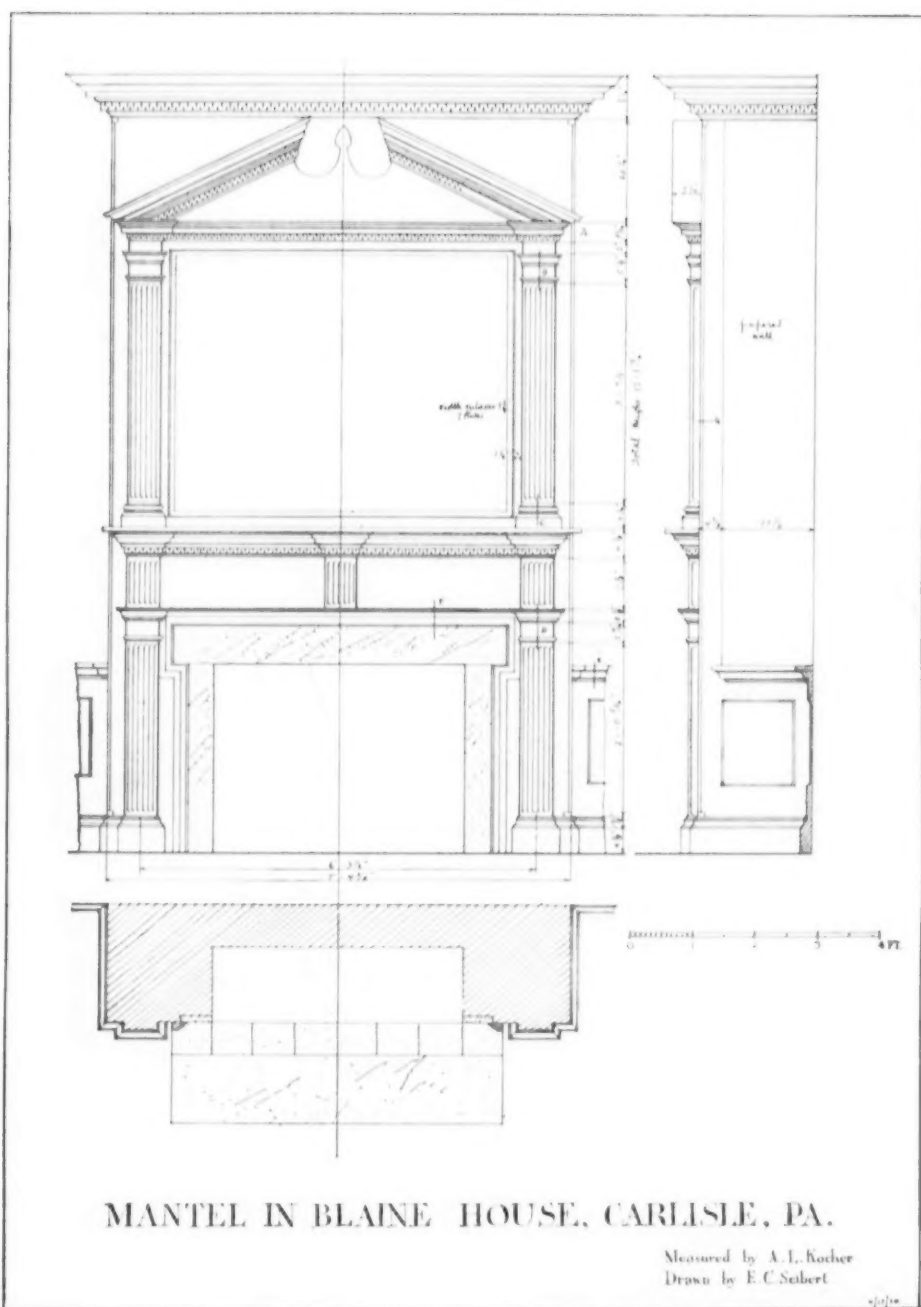


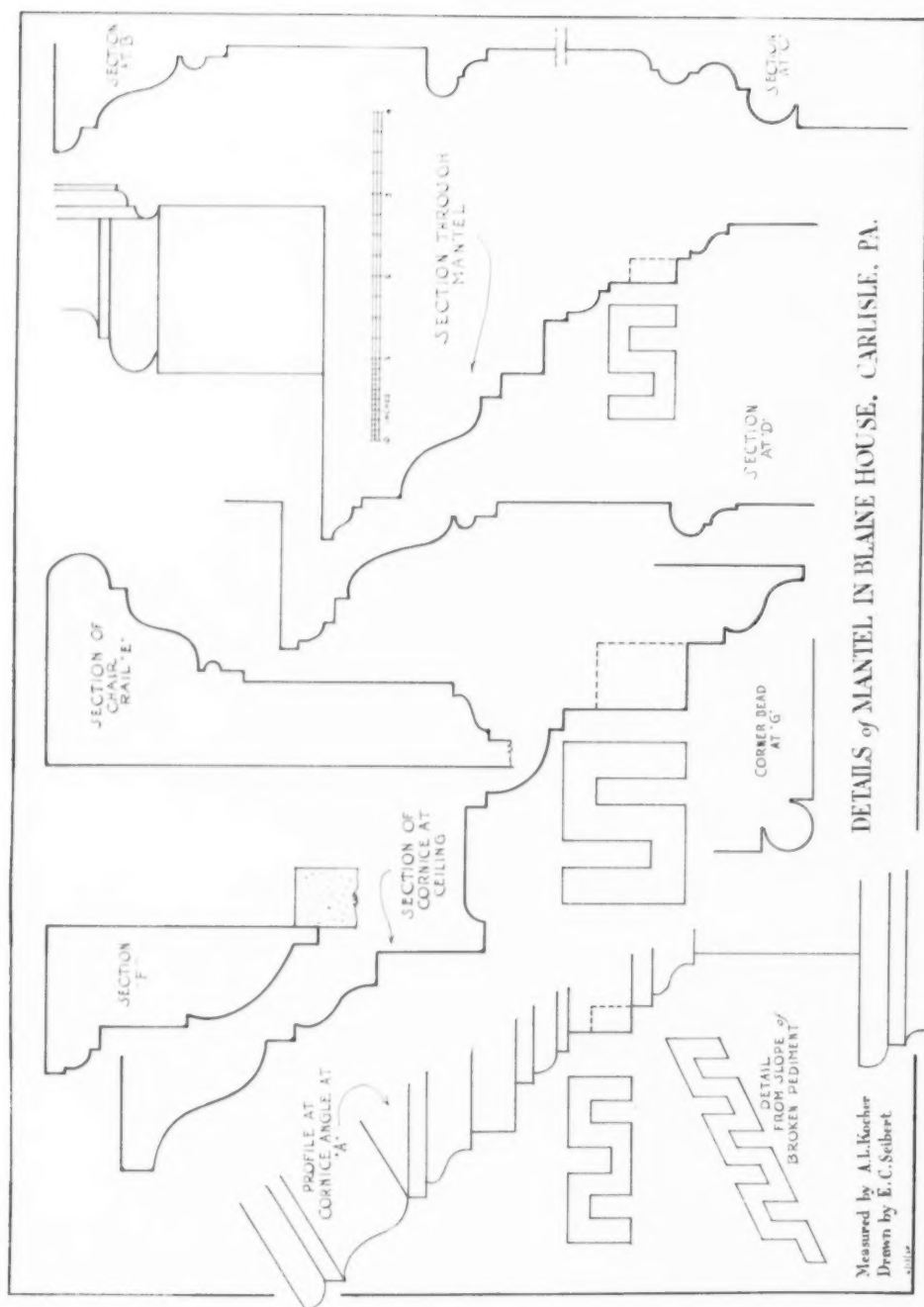
MANTELPiece ON FIRST FLOOR OF TOM MOORE HOUSE,
NEAR CARLISLE, PA. EXAMPLE OF LOW MANTEL.



PHILADELPHIA - SCALE 1" = 1' 0" SECTION
 DRAWING ROOM MANTEL PIECE, WHITBY HALL, PENN. 1754

SCALE 1" = 1' 0" ELEVATION







MANTELPiece ON FIRST FLOOR OF
EPHRAIM BLAINE HOUSE, CARLISLE, PA.

room indifferently, even though kept at a red heat. It was, however, the important forerunner of the stove. Credit is due to Benjamin Franklin for the development of what he termed the "new Pennsylvania fireplace." The invention of the practical-minded Franklin was supported by a pamphlet which lauded its advantages to health, its comfort and economy, based upon scientific principles of ventilation. His fireplace was constructed of plates of iron with a space between them, so that when the air became heated it circulated and thus aided the ventilation. His pamphlet maintained "that there was no draft on the back as before, whereby a person was scorched before and frozen behind. The stove gives out more heat than the old-fashioned fireplace, and saves it from going up the chimney." On the front of a model of this stove, given to his friend, Robert Grace, appeared the device of the sun, with the motto: *Aliter Idem*.

The popularity of the fireplace received a further check when anthracite coal won favor as a fuel, about 1725. Coal had long remained an object of curiosity and few had faith in its power to burn and produce heat. To overcome the incredulity, certain dealers of Philadelphia demonstrated its virtue by keeping a "specimen fire" burning continuously. Stoves were soon devised for coal as well as for wood, and the epoch which gave prominence to the chimneypiece was over.

It is, perhaps, difficult for us (who live in this age of science which caters to our every comfort) to view the mantelpiece without some prejudice. Success in domestic architecture, with us, is too often gauged by the uncertain standard of convenience. A floor arrangement, a window device, a heating system, are each declared a success or failure in relation to the degree with which they contribute to our ease and comfort. Such innovations as the sliding door, the double sash window and our heating system involving the use of steam and hot water radiators are not altogether objects for æsthetic pride; they gained a foothold, not by reason of their inherent attractiveness, but because of their downright practical nature. Perhaps Thackeray was right in keenly resenting the overdeveloped ingenuity of his cousins of the "States," who were responsible for the invasion of England by the "American demon of an air-tight stove."

With us, today, everything seems purposed for physical comfort, while there is too little that adds to the welfare of the soul. An American lady complained on a winter's day that she "could not seem to raise a single room above 80° Fahrenheit," and the objection seems quite natural. While beauty is slowly coming into its own, let us hope that practicality will not receive a further setback, so that architecture as an art may keep pace with the progress of utilitarian science.



FIG. 11. ENTRANCE TO COURTYARD — "WESTOVER COURT," 206-214 WEST 44TH STREET AND 207-215 WEST 43RD STREET, NEW YORK. EVARTS TRACY, ARCHITECT.

TENDENCIES IN APARTMENT HOUSE DESIGN

PART II - EXAMPLES of REMODELING (CONTINUED)



By FRANK CHOATEAU BROWN

THE first of these articles dealt, last month, with the dwelling house "made over" into apartments of small size, which was advocated as of most immediate and pertinent interest because of its assistance in helping us to take care of the great number of families who are desirous of finding living accommodations at moderate prices in those portions of our larger cities most convenient and accessible to their business districts. With a certain part of this subject this present article will still be concerned, for at the present time it is almost certain that for a period of at least five years or possibly more, emergency housing is going to be a problem widespread in this country—and so far as is now to be seen, this type of housing accommodation is the one and only available and practical means of helping the situation in our largest centers of population.

The previous article did not, perhaps, sufficiently indicate that this particular relief is only to be obtained at the cost of creating another problem—still more difficult of solution—because, as a matter of fact, most of the dwellings susceptible to this particular kind of use are already fully utilized either as boarding or rooming houses (when of the better class) or as unpremeditated tenements, plain and simple, when found in the poorer sections of our large cities. In both cases, therefore, they can only be improved to meet their new uses by dispossessing a still greater number of present occupants, who are then in turn condemned to a still more hopeless task in attempting to find for themselves a place to live.

For the moment, it is important to point out and emphasize this phase of the matter. It will later be possible to direct attention a little more specifically to what few endeavors have been made to meet this still more complicated housing problem that is constantly becoming more and more distressing and insoluble. And in the very immediate moment it has been suddenly given an added and unexpected impetus in New York City by a tendency on the part of the wealthier families to turn to the older and tenement sections of the city to find convenient sites for their own new or made-over residences, selecting, of course, those portions that possess some special advantage of outlook, exposure or convenience of location. In the City of New York alone we find at the present writing no less than three such marked localities: a group between 48th and 49th Streets East, another between 65th and 66th Street and a third between 57th and 58th and the East River. Others will evidently soon start up, or may even now be under way—and all will encroach upon property that has previously been put to much more populous use—so that as the better-off solve their own housing problem they will but increasingly complicate the problems of many others, and those of a class far less able to take care of themselves.

This month we are still concerned with a "made over" type of apartment, but used in reference to a better class of property, obtaining a better rental—and therefore probably requiring a greater amount of initial expenditure in order to adapt the old property to its new and more particular class of tenants. Let us first consider an example from one of the

better class residential side streets of New York, in just about the sections that have just been referred to. The illustration (Fig. 12) can again be considered as showing a fairly typical example. A great many other city residences could be equally well adapted to a similar purpose by the same necessary alterations. Therefore, let us consider these changes as they would refer to the usual type of city dwelling rather than as they would refer to this particular one alone. It is at once fairly obvious that the house was originally a rather common type of city dwelling plan. The rooms coming on the front and back of the structure have as obviously been but little disturbed. The greater part of the alteration expense has as obviously been restricted to the middle or central portion, wherein are located at once all the essential conveniences of the plan of the single house and the small apartment, when either is restricted to this kind and size of lot and depth of building development.

First, as to plumbing; this arrangement of fixtures did not, of course, formerly exist on either the first or second floor; while the bath or baths, probably once located upon the old third floor, have been transferred to either the upper story or to one of the floors below. Necessary changes in plumbing in any such alterations as this are always considerable, and the better the class of the property the more expensive is always this particular part of the alteration work. Not only is this due to the change in popular demand for these conveniences since the date of the original dwelling, but it is also partly caused by the greatly increased value that such conveniences always add to the small apartment, where the bathroom, *per se*, is always of particular advantage in renting and making this class of property desirable and profitable as an investment. In the plan that is reproduced, for instance, each duplex apartment contains no less than three baths to a total of other rooms amounting to seven.

Most city houses of this type would contain a principal staircase running from bottom to top of the house along one

party wall—in this case at the left of the plan. That staircase has been retained, with the single change of separating the flights on the third story by means of the door forming the entrance to the apartment occupying the upper two stories, and the closing of all the doors that opened onto the old hall on the first two floors of the edifice. This makes the old front stairs the private approach to the upper apartment as far as the third floor, when it becomes the private staircase to the upper story as well. The back stairs, that may or may not have existed in the old residence, have been abandoned and the space that it formerly occupied given to other purposes on each floor, while a new staircase has been built from the first to the second floor, opening from the small private hall set aside as the front entrance to this apartment on the first floor. The old living room on the second floor has remained undisturbed, although the inner partitions of the two rear rooms and the bathroom partitions have been necessarily rearranged.

On the first floor the old front reception room has been made smaller and turned into a bedroom, while the old dining room at the rear remains, the former butler's pantry at the rear being now the kitchen, from which the staircase leads to the servant's room overhead. In some houses this added rear room might not have extended above the first floor; here this same space is put to good use for similar purposes on the two floors above, and a dumbwaiter running up from the basement serves both the kitchens.

On the third floor, besides taking out the old baths and opening out the central portion of the house plan to make an entry, hall and closets, the space for the pantry has been taken off the dining room, and on the floor above the old bedrooms, as arranged on the front and rear of the house, have required little or no alteration, except as regards the central space utilized for baths and closets. The total result is an old residence turned into two duplex apartments, bringing in more rental return to the owner or capable of being used by the owner as his

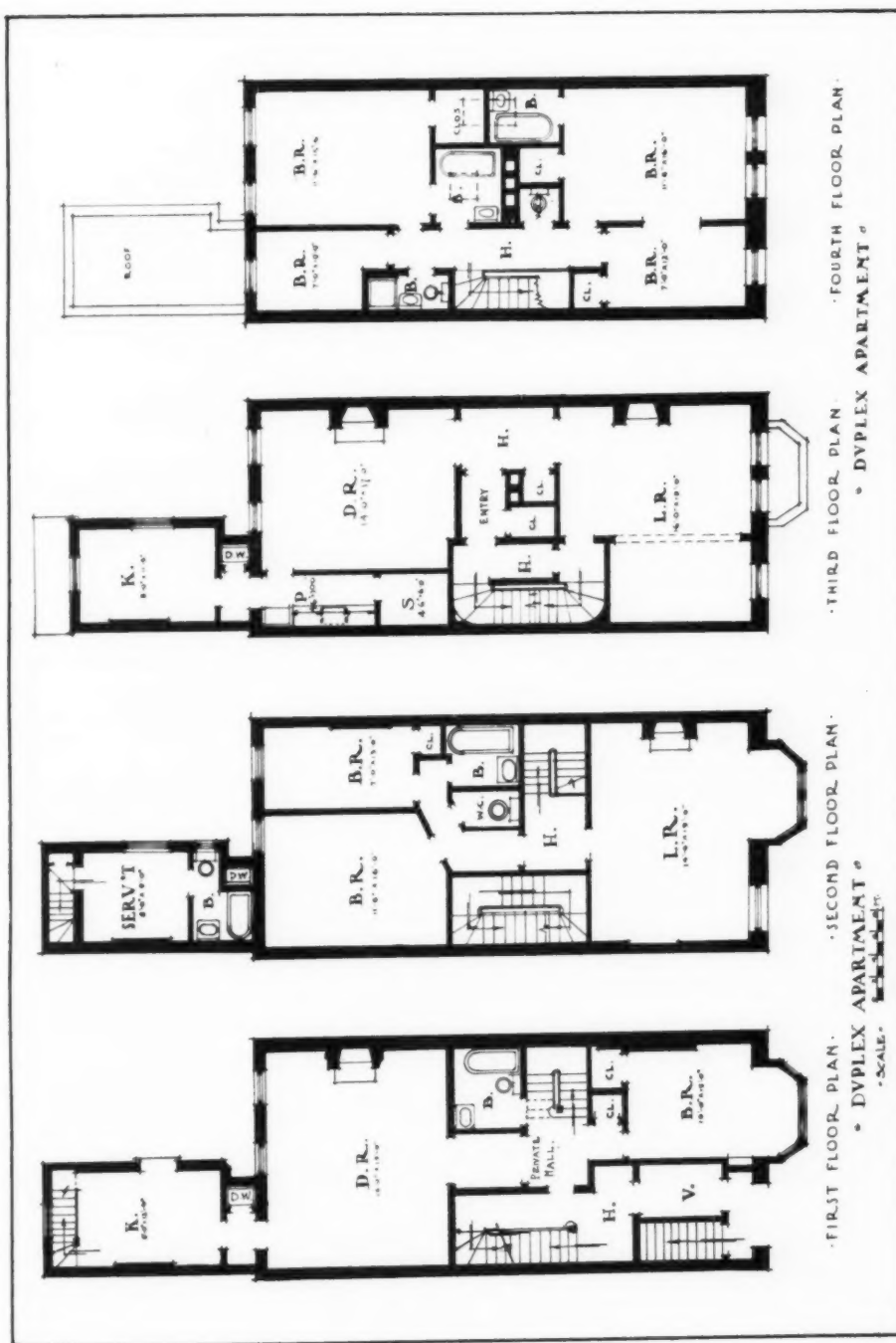


FIG. 12. ALTERATION TO 125 EAST SEVENTEETH STREET, NEW YORK.
 Francis Y. Joannes, Architect.

own residence, simultaneously bringing him in an income from the other apartment available for renting—and all at considerable saving of labor. For the labor problem, mind you, is still the bugbear back of and controlling this whole situation. In this case the changes described have unquestionably made a living place for two families where only one lived before. But more has been effected than that, for in the old case the single family occupant required at least three servants (and probably a chore man) to run the house, while we have now a dwelling for two families where, at the most, two servants would be required, and more probably only one. (For the good of humanity and the building law of the City of New York one certainly hopes that it is neither intended nor allowed that a servant is to occupy the small interior closet on the third floor opening from the dark end of the pantry! We assume that it is humanely intended only for "stores.") It is even possible, under the conditions that often obtain in our time and generation, for the occupants of these small but convenient apartments to dispense altogether with the servant, and so perhaps discover that they can get along quite conveniently and comfortably with none at all!

The chances are that the exterior of a dwelling of this original type is so modern that no changes or alterations in that part of the edifice are required. It might also be pointed out that the adoption of the two-duplex type of apartment development for the four floor edifice of this kind obtains the maximum of size for the two apartments it contains, both as to numbers and dimensions of the rooms, at the same time obviating the long climb to the fourth floor, by making the living floor of the upper apartment only two flights above the street, thus adroitly avoiding the expense of the elevator generally required for taller buildings and also giving the occupants the advantage of not having sleeping rooms all on the same floor as the living rooms, a defect of course inseparable from the ordinary apartment plan.

Before taking up the second class of

small apartment to be covered in this installment (which is the distinctly "back-elor apartment" type, without housekeeping conveniences, of which another variant is the "studio apartment," although the latter has often kitchen appointments of more or less embryonic a type) there are one or two examples of undoubted interest to be considered that are yet impossible of classification into any exact division or type. There also remains another example of the alteration of a single family dwelling into small apartments that would better next be taken up, because it is so nearly comparable to the plan last considered. This is seen in the so-called "Chelsea Studios" (Fig. 13).

Although called a "studio," the rooms are actually arranged in suites to provide generally a bedroom and living room, with bath, the whole five floors providing ten suites, of substantially similar arrangement above the second floor. Again we have a city house plan, rather narrower and deeper than the last example, however, and therefore with side rooms especially cramped in area. Indeed, under more modern housing laws, in many cities these rooms would not be permitted for sleeping purposes.

The arrangement of the first and second floors indicates clearly that the architects found some difficulty in coping with the disposition of rooms existing on these floors in the original dwelling. The necessary baths have been obtained, but, in the one case upon the front and in the other upon the back, it has been found impossible to provide a separate room for sleeping except in an inner or "alcove" space—again a method frowned upon by many recent "housing laws." In these apartments no provision whatever has been made for cooking—hence they fall into the second category set for this installment; while the plan of all floors above the first provides for a material convenience, in that it is made possible to throw the front and rear apartments into one, thus enabling a tenant to obtain more space when found necessary, or for a whole floor to be used by two friends in common when they so desire.

The original main divisions of the old

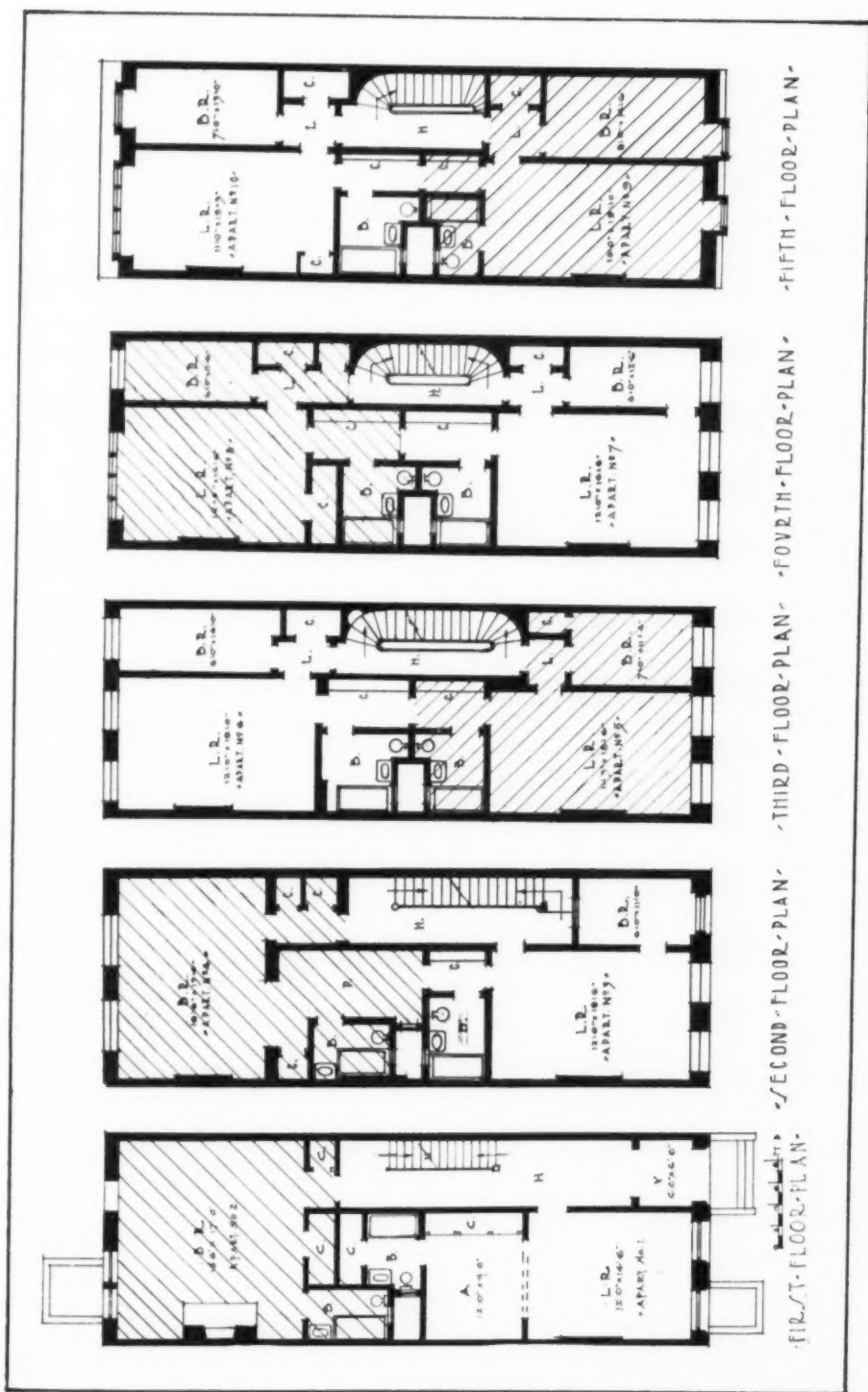


FIG. 13. "CHELSEA STUDIOS," 449 WEST TWENTY-SECOND STREET, NEW YORK.
Francis Y. Joannes and Maxwell Hyde, Architects.

house plan are still discernible, more clearly upon the upper floors, although in both the lower floors it is equally clear that the baths and closet requirements have merely somewhat encroached upon the floor areas previously given to the principal rooms at front and back. And once again it is obvious that the required baths were the occasion of the major part of the alterations made in the central portion of the structure. The exterior, on front or back, is not affected; and therefore does not require any changes or alterations, unless it is perhaps considered desirable to modernize the design of the façade.

Let us next take up the arrangements of two or three plans that present rather more individual and less usual arrangements than any we have yet studied. In arrangement these plans are intermediary between the types now being examined and are classifiable into one group merely from the incidental fact that they have all recently developed on a street where its widening has required the taking of a certain portion of the front of the lot, thereby cutting down the space that remained, so as no longer to be available as a room for single family or rooming house purposes. It was accordingly necessary, in rebuilding the front upon the new street line, to make certain alterations in the interior arrangement of the dwelling in order to make the property bring in the needed additional return required to pay the higher interest demand-

ed to meet the additional taxation values and betterment assessments that the city will now levy on these property owners.

The two plans first to be considered were originally the same as the New York houses just discussed. One, Fig.

14, was of the simplest possible city house type—a room in front and back on each floor and a stairs and closets (or bath) in between. A ten foot taking left little of the front room remaining, and the building was rearranged into four floors of apartments of one room, kitchenette and bath. The space between the front and rear rooms has been so arranged that it may be used by the tenants so as to best suit their individual requirements. It might be the small entrance hall to the suite; it could be used as a dining space, convenient to the kitchen, with a small collapsible table and chairs on either side, or it could be used to contain a cot bed for extra sleeping accommodation against the side wall. No change was made in these floors beyond the partitioning of the front

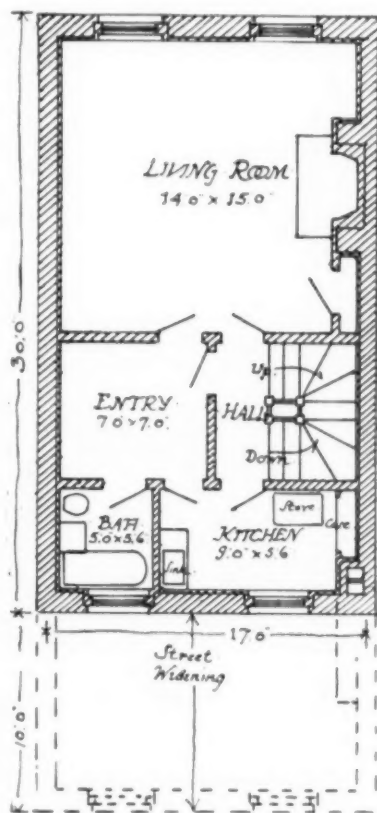


FIG. 14. SINGLE HOUSE ALTERATION INTO SMALL KITCHENETTE APARTMENT, BEACON HILL, BOSTON.

space and the relocation of the doors in the inner partition connecting the little private entry with kitchen and bath. The location of these buildings was convenient to the business and theatre sections of the city, equivalent to the district mentioned in New York, and the result of the alteration was to provide the owners a return from each floor equivalent to that obtained before the alteration from the entire living portion of the dwelling—a

sum now no more than sufficient, it is to be remarked, to pay an equivalent return on the increased cost of the investment.

Fig. 15 shows two alternative plans for the floor arrangement of a similar building, differing only in the fact that the greater width of the lot has made possible the two room width on front and back commonly found in wider city dwellings of this kind. In these plans the old arrangement of the floor is shown where it has been altered by the dotted lines, and the numbers are so located as to give the key to the changes that have been made from them. The rear of Scheme B also shows the original condition of the plan, (1) marking an old lift abandoned in the scheme marked A. In this right hand plan the bathroom is also kept at its former location, a portion of the old front room (7) and a corner of the room (8) being used for a kitchen and serving or

a storage space, with the old entry (5), leaving the old closet (4), inner entry (3) and alcove (6), with what remains of the front room to form a dining or living room. (The Boston "tenement house law" contains a clause so badly worded that it is interpreted to mean that no bathroom can open from a sleeping room in any type of city residence; so that in a small plan like this it becomes necessary to open it from a kitchen, dining or living room, or from an entry, no matter how small, which can then open from a sleeping room without objection from the authorities.) In the alternative, Scheme A, the whole front portion is thrown into a room to be used for a studio, leaving a large light closet for canvases across the rest of the front, and the former small side room at the rear is subdivided into a kitchen, bath and light shaft.

The next plans to be considered present

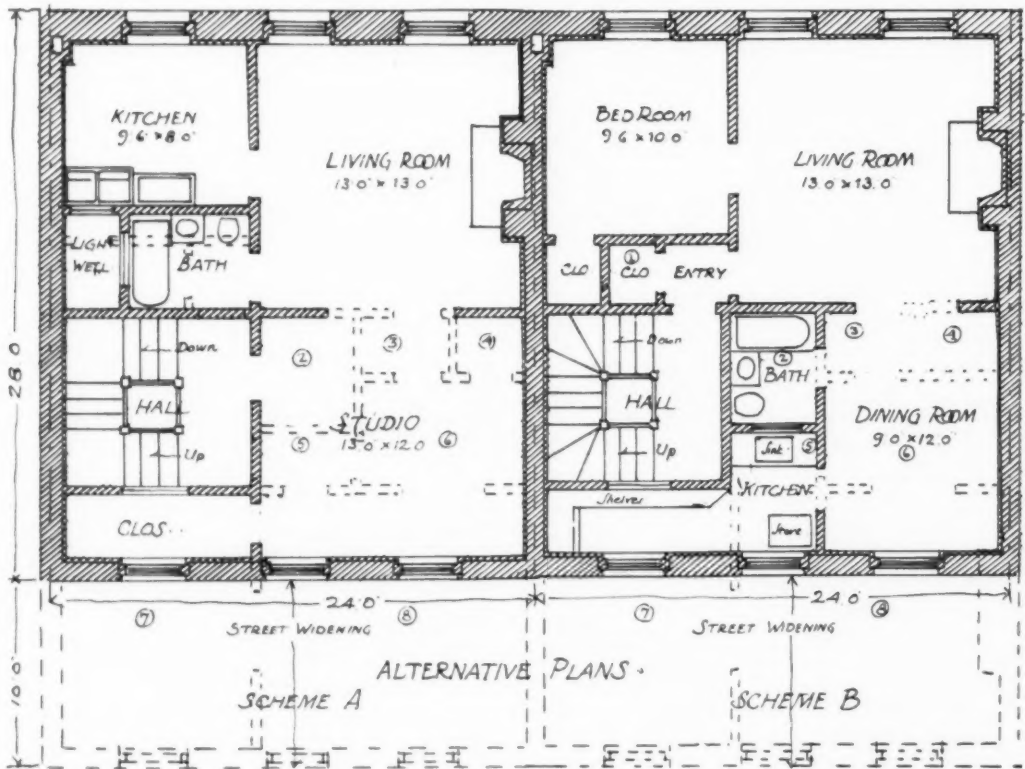


FIG. 15. TWO ALTERNATIVE SCHEMES FOR DIVIDING AN OLD DWELLING INTO STUDIO APARTMENTS, BEACON HILL, BOSTON.

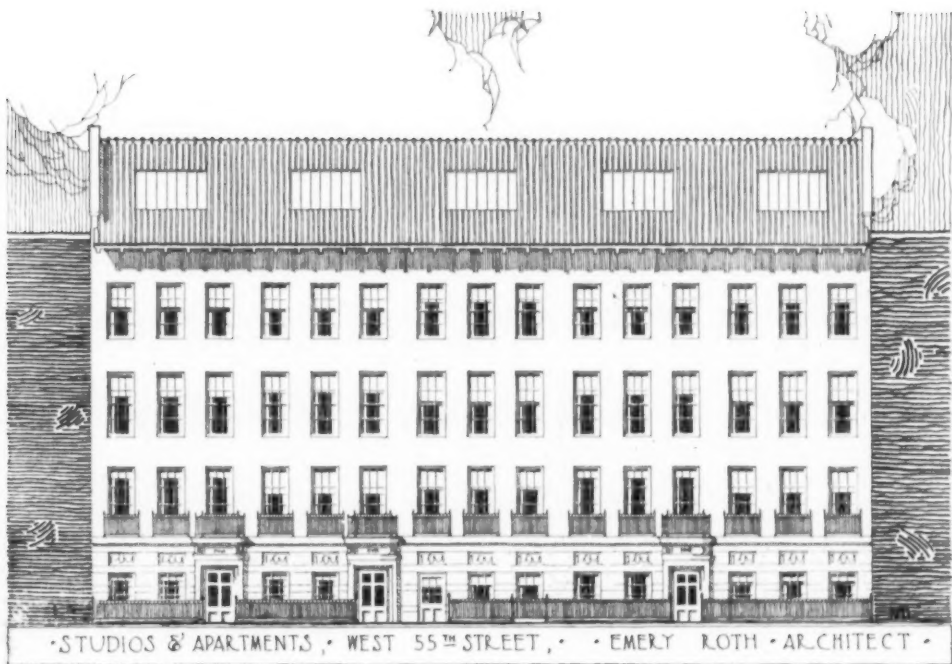


FIG. 16. STREET FACADE OF FIVE DWELLINGS AT 320-328 WEST FIFTY-FIFTH STREET, NEW YORK, ALTERED INTO GROUPED APARTMENT AND STUDIO BUILDINGS.

Emery Roth, Architect.

several unusual elements. They illustrate the opportunities that develop in the making-over of several dwellings when they can be handled in groups of several adjacent lots, a situation particularly favorable to the conditions still existing in New York City, where a great many of the large realty-holding estates still control large blocks of lots in many portions of that city. In New York, too, conditions are such that no attention need be paid to the single consideration that is against this group development of lots, the thought of the awkwardness of "unscrambling" the property at some later date in the event of possible sales taking the form of separate owners, each wishing only to have his own particular house. In New York the motion is more and more definitely toward the aggregation and grouping of lots, as it is the only profitable way toward future improvement of the property under the laws that now appertain governing heights of build-

ings and their height set-back restrictions.

This trend, while now localized only to New York, must inevitably soon apply to other American cities, where it is sincerely to be hoped, however, that it will become operative on a considerably lower height limit than it has been possible to apply in New York—where the existing conditions as to heights of buildings had already gotten too far out of hand. With the surety, therefore, that the future demand for property is to be in blocks of many lots, there is every encouragement for the individual owner to undertake his "temporary" improvements (as they are so fond of saying in New York), intended to "carry" his property and bring in a return over the transition period between the dwelling and business uses of the site, on a scale not yet to be elsewhere understood or emulated. In this case the alterations were concerned with two blocks of houses, one of five and the other of three lots, situated on West 55th

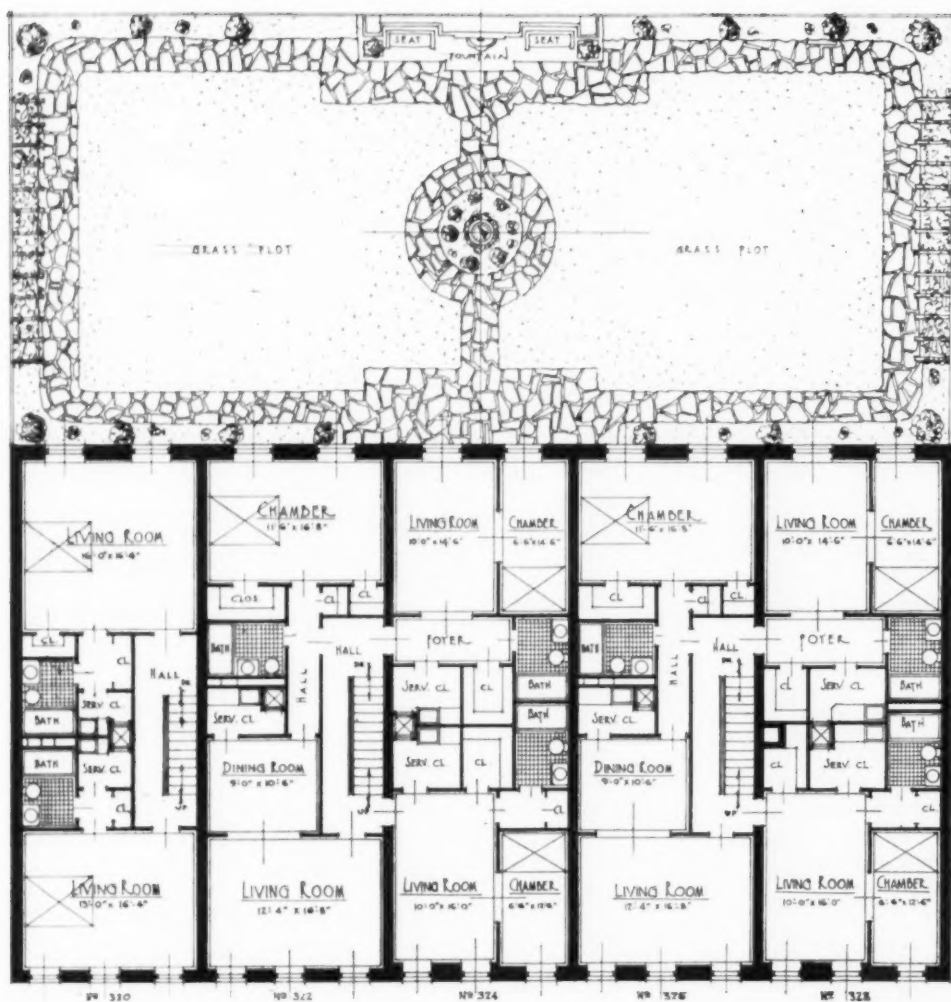
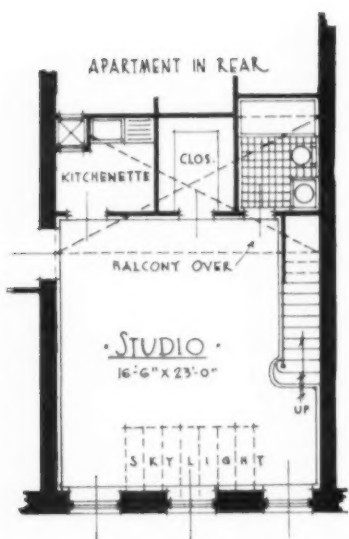


FIG. 17. PLAN OF TYPICAL FLOORS OF FIVE DWELLINGS AT 330-328 WEST FIFTY-FIFTH STREET, NEW YORK, ALTERED INTO APARTMENT AND STUDIO BUILDINGS.
Emery Roth, Architect.

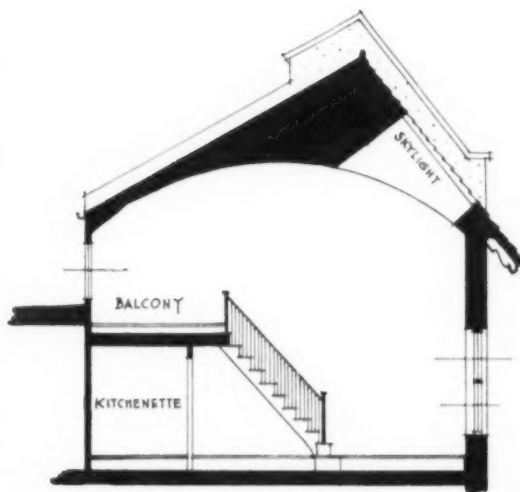
Street, between Eighth and Ninth Avenues.

This is a section where a number of the oldest buildings are being torn down or converted to other uses, and is apparently on its way to becoming the center of the uptown studio district. These two groups of houses have remained in their original state for a long term of years, but have recently been converted to apartment house purposes. The groups were each treated, so far as the law

would permit, as a single unit. But in order not to extend beyond the limits allowed for a non-fireproof building, only two houses could be connected by a doorway through the party wall, making it possible to eliminate the stairways in each alternate house and so employ the space formerly occupied by these halls and stairs for other purposes. With the relief thus obtained, the designers next endeavored to so divide the space between the principal structural walls as to ob-



PLAN OF STUDIOS ON TOP FLOOR



SECTION THRO' STUDIO SHOWING BALCONY

FIG. 18. PLAN AND SECTION THROUGH TOP FLOOR STUDIOS, 320-328 WEST FIFTY-FIFTH STREET, NEW YORK.

Emery Roth, Architect.

tain the greatest possible diversity of plan and arrangement, without altering the size or structure of the buildings.

Reference to the plan, Fig. 17, will show the various rearrangements made of the floor spaces available, so as to obtain apartments of one, two and three rooms, respectively, each apartment being provided with a bath, and what on the plans is called a "serving closet" (in reality a "kitchenette"), each serving closet being in turn connected by a dumbwaiter with a general kitchen located in the basement, so that the various apartments can be served from a common menu, or may do their own cooking—in the kitchenette. The center building in each group is provided with a restaurant upon the first floor for the benefit of all the tenants.

The house at the extreme left of the plan shows an arrangement again such as might be obtaining in any single house to be made over into the purposes of small living rooms with private baths—the necessary alterations being, as has before been stated, limited to the central portion of the floor plan, and principally be-

ing concerned with the plumbing, and—in this case—with the serving closet and dumbwaiter, which are rather unusual elements in the plan. No alterations of the stairs or hallway are necessary, either in this plan or in the plan shown next to it, although the latter has been arranged for the occupancy of the entire floor by one tenant, and the rearrangement of the central part of the plan, while less extensive, has somewhat overflowed into the old rear room, where the row of closets has been set off along its inner partition.

The floor arrangement shown on the central house plan, adapted to fit a floor on which the front and rear spaces were divided into a larger and smaller room, has been changed by placing the new baths where were the old stairs and hallway, and by altering a few necessary partitions in order to get the doorways broken through the party wall to connect with the two-room suites obtained on the front and the back of the floor plan in this arrangement. Although these various plan-arrangements are here shown as though they were all on the one floor, they are, as a matter of fact, typical of the ar-

rangements found on the several different stories in the block. The old separate yards at the back of the houses have all been thrown together, and a garden layout of about fifty by eighty feet has thus been made possible. A central heating plant for the group has also been provided.

On the exterior, the old brown stone fronts have been dressed up by a stucco surfacing and a continuous roof carried over the buildings to bring the isolated units into the one composition. The elevation (Fig. 16) shows the studio skylights, and the section through the upper front story (Fig. 18) shows how these studios are arranged in the house so as to take advantage of the opportunity offered by the upper stories, and make that fact an asset toward increasing the rental value of a floor that has otherwise in New York generally to accept a lesser rental, merely because the tenant has to climb the additional necessary flights of stairs required to reach it—and it would be, of course, absurd to go to the expense of providing elevators in buildings as low as these. As is indicated by the section, the studio occupies the level of the fourth floor (counting the floor slightly below the level of the street as the first) as well as the space in the sloping roof above, the latter giving the needed height of twenty feet, besides the light, desirable in a working and practical studio, as well as the convenient balcony that is shown on these drawings. This gallery can be used merely for storage purposes or for sleeping, if so desired by the occupant. The whole makes an unusually well thought out and practical development of an architectural opportunity to modernize a number of separate dwellings situated in immediate juxtaposition to each other.

The treatment given to the problem just described leads naturally to the consideration of another solution, found a number of years ago for some old properties lying in a much more valuable section of New York City. Although this solution is not a recent one, it is yet so little known, generally, and still is in so many ways a model successful handling

of the reconstruction of an old and run-down piece of real estate, that it is well worthy of detailed study at this point. The property consisted of five houses on the upper side of West 43rd Street and the five houses lying directly back of them on 44th Street. The opportunity that was presented the architect was unusual in that he had to deal not only with a block of five houses, but with another block of the same number backing upon them, with nothing separating the properties but an old blindboard fence and a physical difference in the grade of the two sets of back yards. The property was very valuable, lying immediately off Broadway, but the old buildings were bringing in a very small return as rental for residential and somewhat dubious other purposes. The owners did not feel that the time had yet come to develop the property with a new building, although they were at about this same time constructing a new "temporary building" covering the entire length of the block adjacent and fronting on Longacre Square. This new structure was of 6 stories height, and given to stores and offices, with a principal part of the rear street floor occupied by the Shanley Restaurant.

The property lying in back of this parcel was valuable for store purposes on the two side street frontages—so valuable that it was desirable to find some way of dispensing with the five doorways, entering the upper floors of the houses from the street. The fire law limitations also restricted the area that could be thrown together upon the upper stories to not more than two of the houses. The architects consulted evolved the following very ingenious solution.

All the entrances to the upper floors were abandoned on both streets, except the one leading to the center house of each group. This passage was then continued through the house to the rear yard, and all the remaining frontages upon both streets were then given up to the store show windows, adding materially to their rental value. Although no first floor plan is given, the rear of the lower group of houses in Fig. 20 (the back of the prop-

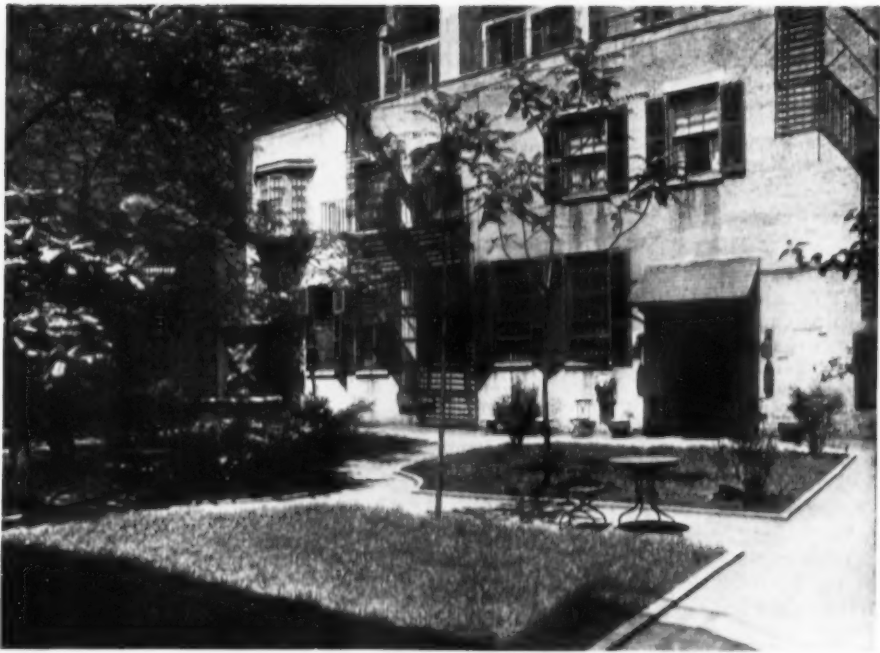


FIG. 19. COURTYARD—“WESTOVER COURT,” NEW YORK.
Evarts Tracy, Architect.

erty fronting on 43rd Street—as is indicated by the lettering along the left hand side of the plan) shows where this central corridor penetrates to the rear yard, and its direct connection by a corridor across the rear of the two right hand stores with a new staircase ascending from the rear to the second story, where connection is made with the old stairs extending up through the house from that floor, and—by means of a doorway cut through the party wall—this staircase also connects with two of the old houses at once. The left hand pair of houses is reached the same way, except that the new staircase from the rear is approached by passing for a short distance through the courtyard—instead of being connected by an inside corridor back of the stores. The same arrangement is carried out on the first floor of the houses on 44th Street, and the line of the axis of the two street entrance corridors is marked upon the plan. The second floor arrangement is also shown, as it was worked out on the houses facing on this same street, the

heads of the three staircases connecting this floor with the entrances from the court below appearing upon this part of the plan, along with the five old staircases rising to the upper stories of the houses. Of course, the staircase from the first floor for the center house starts up from about the middle of the corridor entering from the streets—and so does not appear upon the fragment of the rear of the first floor plan that is shown.

The second floor plan was then rearranged, by the alteration of the internal partitions and plumbing, to give a three room and bath apartment upon the front of each of the houses, and a two room and bath apartment upon the rear. The shallower plans of the upper floors appear upon the lower part of the drawing, as facing on 43rd Street, showing precisely similar two room and bath apartments upon the front and rear of each house floor. It only remained for the space occupied by the old back yards to be leveled up, graded, laid out simply with paths and grass, embellished slightly by a

fountain and a few casts upon the walls, to make it—with the two or three old trees that had not been disturbed by these changes—by far the more attractive and quiet living side of the houses. The old brick rear walls about as simply built as had been possible—were merely given a couple of coats of warm color, and the single structural embellishments required on either the exterior or the interior, were the entrance doorways (Fig. 20) leading to the staircases connecting with the upper living floors.

It remains merely to state that this alteration has well proved its value, bringing in an income return that makes it easily possible for the owners to wait patiently

their time for tearing down and replacing these structures with a new building. That now need not be considered until the development of the surrounding property has reached a point that they can be certain the new building, when erected, will be so planned as to meet a permanent demand. The apartments now bring in a satisfactory carrying income, having been about the most popular of any of those available to bachelor occupancy. It might also be added that a well conducted valet service, including the serving of breakfast and tea in the rooms of the occupants from a common kitchen has helped to make these buildings popular, especially with visitors from England, who have found this place to provide them with about the same class of comforts they are accustomed to in that country, the "Albany" in London being perhaps the example best known to us in this country. It is said that, during the early years of the war, almost the entire munition supply business of the Allies was conducted from the rooms provided by this alteration.

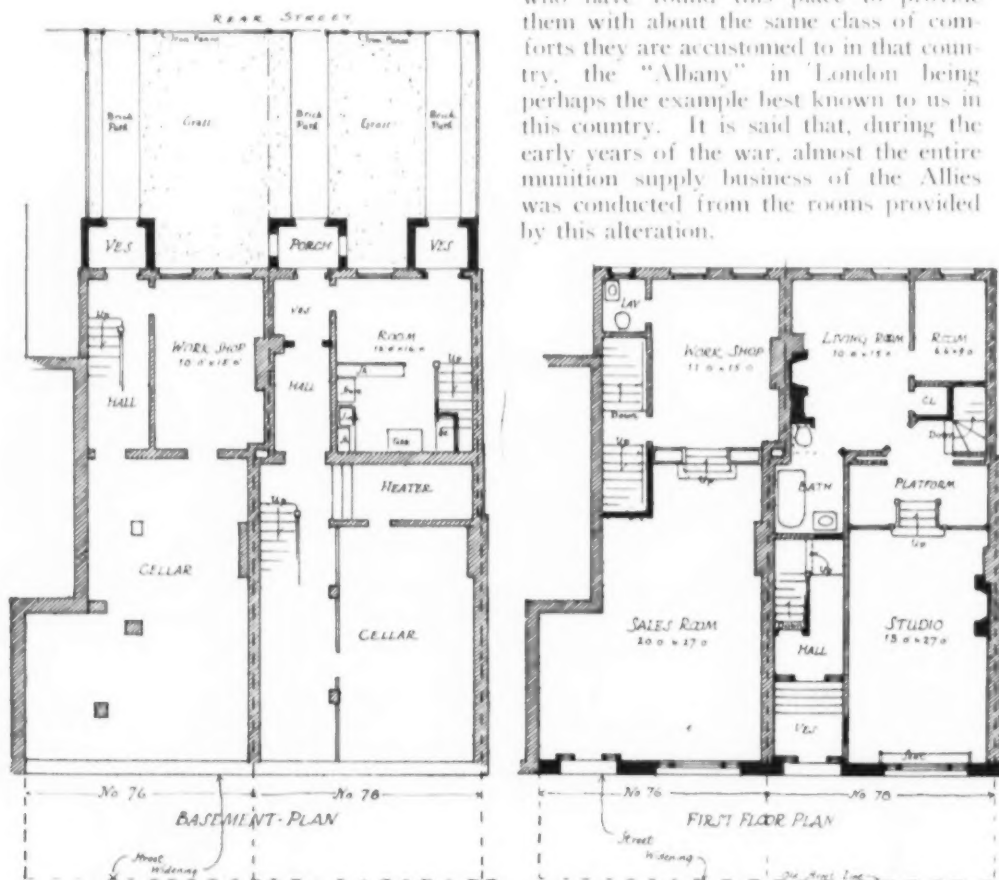


FIG. 21. BASEMENT AND FIRST FLOOR PLAN—ALTERATIONS OF TWO OLD BUILDINGS ON BEACON HILL, BOSTON, TO BUSINESS, STUDIO AND APARTMENT USES.

Frank A. Bourne, Architect.

An unusual solution that quite defies classification is that shown in Figs. 21 and 22. There are here portrayed the floor plans of two adjacent houses in Boston, also affected by the widening of a street, but having an additional factor in that they were on lots so shallow that it was possible to enter the buildings from another street at the rear. This rear street was of a quieter and more residential type, whereas the front street was a busy one, with much teaming and a gradual tendency toward light business development. The left hand of the two houses had also previously been occupied by an antique furniture business, which desired to stay through the alterations and still occupy the premises after the new fronts were completed. In the previous occupancy of this building certain of the interior dwelling partitions had already been removed, which explains in a measure the changes now indicated as being made by the blacked-in portions of the partitions.

The old front stairs and hall had previously been located on the first floor, at

the front and immediately back of the entrance door. This was discontinued and a new staircase carried up from the rear, connecting with the shop so that it could be used to reach both basement and upper floor, where much of the work of the repair departments will still be carried on. The rear extension of the plan, that formerly stopped at the second floor, has been carried up for another story, so as to provide a living apartment upon the second floor; and the top floor, at present used by the occupant of the street store, can easily, as may be seen, be altered over into a studio or for living purposes.

The right hand building, numbered 78, while originally a private dwelling, had at some subsequent period been altered into a cheap tenement, the principal sign of which was the vulgar yellow brick front, that had fortunately in the process of street widening been swept away. The building had also formerly been a story higher than the present alteration contemplates. The new additions and changes are again shown by the blacked-in portions. The old front stairs is re-

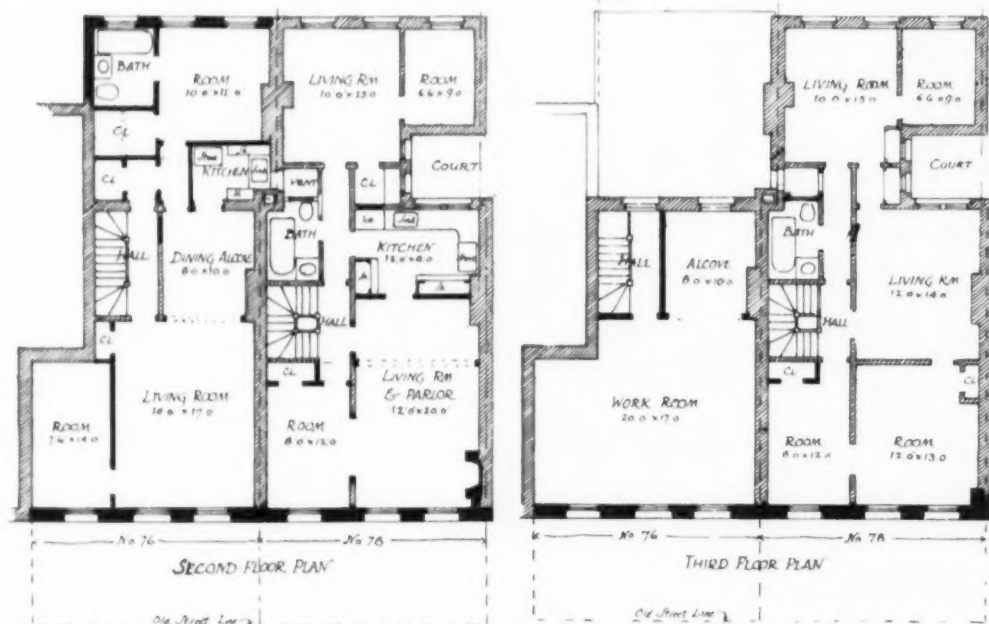


FIG. 22. SECOND AND THIRD FLOOR PLAN—ALTERATION OF TWO OLD BUILDINGS ON BEACON HILL, BOSTON, TO BUSINESS, STUDIO AND APARTMENT USES.

Frank A. Bourne, Architect.

tained as an entrance to the upper stories, and it will be seen that, although it is proposed to make use of the main street floor as a studio for the present—attached to the living quarters entered from the street at the rear—it is yet very easy to make over this floor also for store purposes at any time when the demand warrants the slight alterations around the front entrance that will then be necessary. The first floor is already lowered to the street level, thus gaining added height for the studio meanwhile. The rear of this first floor provides living facilities, with the exception of the combined kitchen and dining room, which are at the rear, with the separate entrance to the studio, upon the floor below.

Both the second and third floors have been worked out so that they may be let, in each case, as a separate and complete suite, or it is even possible to subdivide each floor into two smaller suites, or to rent the two upper floors to one tenant as a duplex apartment. Of course, this possible polyglot ease of adaptability has not been secured without making some concessions that will obviously make it a more convenient or desirable use to do one rather than another of the alternates. The scheme as shown here gives merely the plan on which the alteration was started, it being supposed that a definite adjustment of these tenancies would be decided before its completion, when minor readjustments could still be effected.

Before concluding our consideration of the problem of the "made over" apartment, by which we have previously meant the dwelling made over into the apartment, it seems desirable to show one example of a very significant alteration of an old fashioned apartment building into a newer and more modern type of apartment—a quite novel and suggestive problem to record, because of the tremendous number of apartment buildings of this type that are scattered over the entire United States and exist in such great numbers in all our larger cities. Therefore the lesson contained in this example is of especially wide application and use.

The problem is again concerned with a group of apartment buildings, in number

five (two pairs and a single), all of the old fashioned long spun-out plan with a front living room, a rear dining room, and a long dark narrow connecting passage from which all the bedrooms and the bath open in between. The type is familiar to all, and the previous arrangement of these particular apartments is shown by the dotted lines in the center double plan, the alterations being indicated by the darker portions of the plan shown over this part of the area, the completed arrangement being perhaps more readily discernible in the double plan at the right of Fig. 23.

Of course, nothing could be done to improve the narrow light courts—the interior walls and the floors being alone left undisturbed by this rearrangement. The buildings shown are at 5, 7 and 9 West 65th Street, in a desirable and expensive neighborhood, very near Central Park West. The alterations were primarily made to accommodate the teachers of the Ethical Culture School, what apartments remaining after providing for those teachers who desired to live here being rented as sources of income for the building management. The apartments originally consisted of eight rooms and a bath, strung along the hall in the well known "railroad" manner, with a stairway placed well toward the street. This stairway was entirely removed and a new fireproof stairway, enclosed in brick walls, was installed in the center of the depth of the building.

It is perhaps worthy of note that the iron and marble fireproof enclosure of this stairway was not a requirement of the Tenement House law, which permitted the alteration of these buildings without any improvement to the means of exit other than the installation of an additional fire-escape. As altered, the two larger double buildings now have on each floor one four room and bath, one three room and bath and two two-room and bath apartments, well provided with closets and good ventilation. The one staircase serves four apartments, and each one is entered through a small vestibule. The three smaller apartments are provided with a "kitchenette alcove"



FIG. 23. PLANS SHOWING ALTERATIONS OF "OLD TYPE" NARROW APARTMENTS INTO MODERN SMALL APARTMENTS. 5, 7 AND 9 WEST SIXTY-FIFTH STREET, NEW YORK.
Emery Roth, Architect

opening from the living room, the larger apartment having a fully equipped kitchen.

The narrow, single building at the left was altered to provide three non-house-keeping apartments upon each floor, two consisting of two rooms and bath, and the third of one room and bath.

In connection with the rebuilding of these apartments, the buildings were given some of the group advantages that have already been indicated as available possibilities in the other groupings of buildings already considered. There is a central dining room and kitchen, which communicates with each apartment through the dumbwaiters rising from the basement. There is also a well equipped common laundry in the cellar of the No. 5 building. This laundry is fitted out with modern washing machine, extractors, mangles and dryers, and is intended to be run by competent trained operators for the benefit of the occupants of the five buildings.

Of course, the necessary alterations in these buildings were so drastic that it could not but be regarded as a substantial rebuilding of the structures, and therefore the cost of making these alterations now amounted to approximately as much as would have been the cost of the entire construction of these buildings at pre-war prices. Yet, considering the present high costs of labor and materials, even this amount is not excessive, when there is taken into account the complete modernization and renovation that has been effected, and the fact that the rental now being obtained from these properties has been nearly trebled. This but goes to confirm other experiences which contribute to show that the people formerly willing to live in these apartments have now come to regard it as so inconvenient to force their guests to walk forty to fifty feet down a dark and narrow passage in order to get to the dining from the living room, that, wherever alterations such as these have been made to modernize the old six-seven-and eight rooms apartments of this type into apartments of three and four rooms, the rental of the smaller half-size apartment has been generally

greater than the previous rental of the whole.

Even when located in the best neighborhoods, these buildings do not easily lend themselves to any improvement at the hands of the ordinary realty operators, who never consider, when buying them, the opportunity to put them into a better and more lucrative condition, because their original layouts were so inherently poor. There undoubtedly exist many localities where it would be preferable, both economically and socially, to tear out these old apartments and replace them with entirely modern structures of greater height. But on the other hand, where they now exist in great numbers, as is true of the locality where these buildings in particular are located, it often follows that it is considered impracticable to tear them down. In that event, this example is here published to show that it is still allowable to make improvements in them that will better their income values, whether or not so extensive or drastic changes as are shown in this particular instance can be undertaken.

In closing this consideration of the problem of obtaining apartment conveniences by means of altering over existing structures, of whatever kind, it might be stressed that this is at best a compromise improvement. It is countenanced here or advocated, only under those conditions of urgency that are likely to confront us in our larger cities for the next four to six years, as a means of somewhat bettering the conditions of living and meeting a demand for middle-class housing that is, as a matter of fact, unlikely to be met in any other way.

It is not considered ideal as a solution of the housing difficulty, but it is regarded as a practical means of meeting the situation that is now generally recognized to exist. Let us also face the facts clearly, without misleading ourselves. By that means only can we fully realize the extent to which this problem will have to be met. It is easy to say that we are "short a million homes in this country"; and, too, that "they *must* be supplied"—but by whom? Unless we—you, and you and I—undertake to accomplish that result, it

will not happen. The day of miracles is past; also, so far as the immediate future is concerned, the day of the realty operator interested in meeting the need of the middle class family. He, lured on by the higher standard of profits available during these few recent years, is after far higher and more alluring game. At the other end of the scale, philanthropy—when concerned at all—is interested only in meeting the need of a far more modest type of living demand. The government seems neither concerned with nor capable of understanding the very alphabet of the problem, as was demonstrated so conclusively and wastefully during the war.

The whole point of the matter is that it is capable of being attacked by the *individual* householder. Families desiring a permanent home for themselves, especially when confronted by the necessity of so simplifying their living conditions that they can be independent of servants, are the only intensely interested parties, and unless they can find some means of helping themselves to what they need, there is little likelihood of any one else feeling concerned to do it for them. To that type of individual is the moral of this much of these articles ad-

dressed. The means are here shown him by which it is not only possible for him to obtain a home for himself, but also to so subdivide some existing dwelling as to provide at the same time a home or homes for others of his class who find themselves in the same predicament.

The problem of financing such an operation is also far simpler than when starting with a plot of undeveloped land. The initial value of the property is more evident and a mortgage generally easier to obtain, while the income to be derived from the rental of the other apartments is at once a guarantee to the mortgagee, and a source of regular income to the mortgagor from which taxes and interest charges can be taken, without regard to any other business income of the owner.

It requires merely that he exercise judgment in selecting the property to be thus developed—a comparatively easy matter, as the same things that will make it convenient to his own purposes, will tend to make it appeal to others of his class—and also the little additional imagination on his part that is required to see how it can be developed in some such way as will meet his needs along the lines here illustrated.

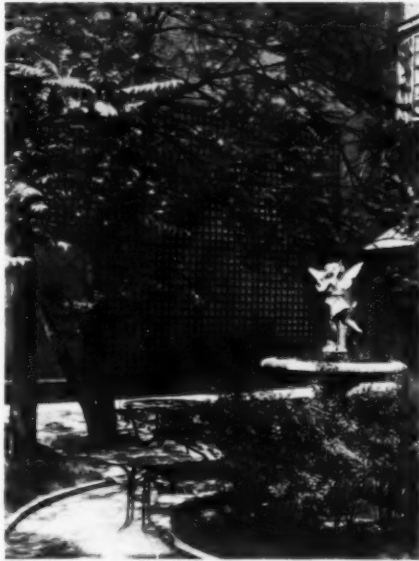
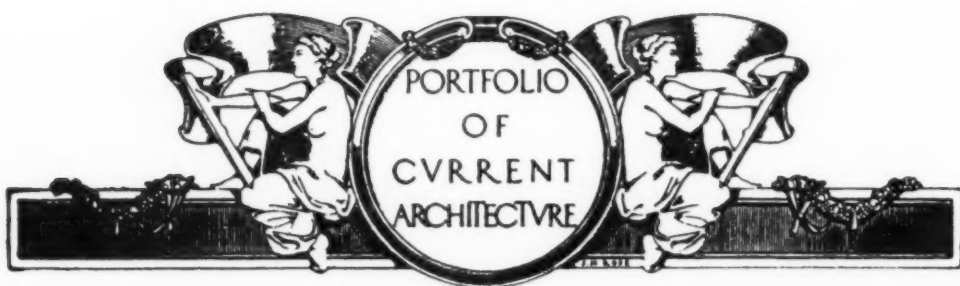
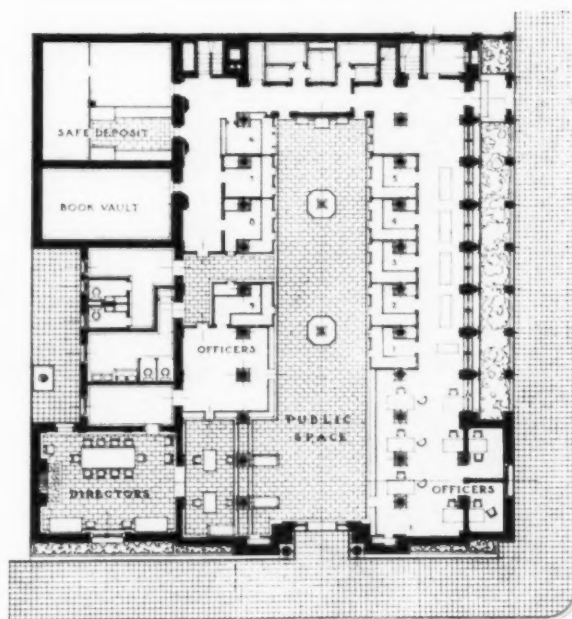


FIG. 24. DETAIL—"WESTOVER COURT," NEW YORK.



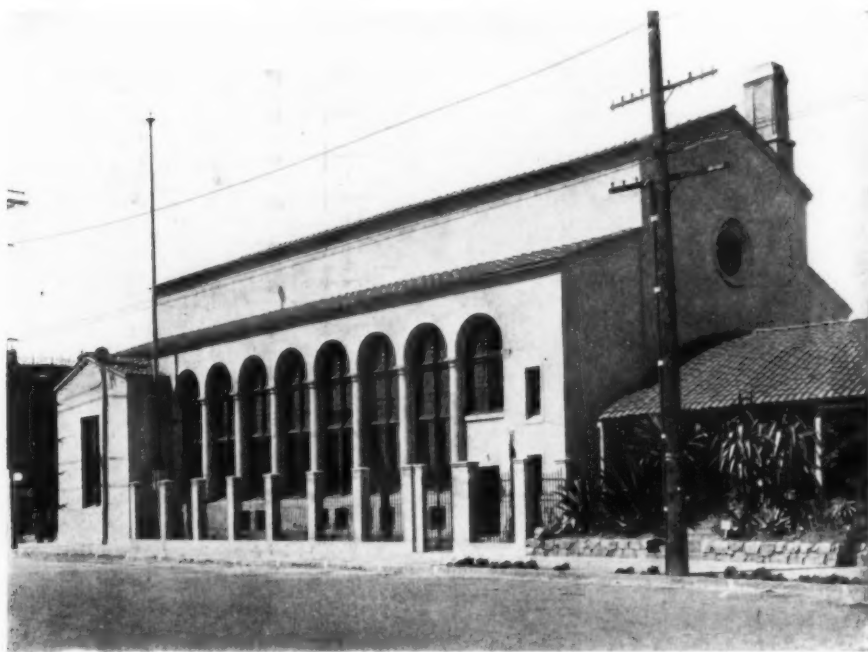
DIRECTORS' ROOM — COUNTY NATIONAL
BANK AND TRUST COMPANY, SANTA
BARBARA, CAL. MYRON HUNT, ARCHITECT.



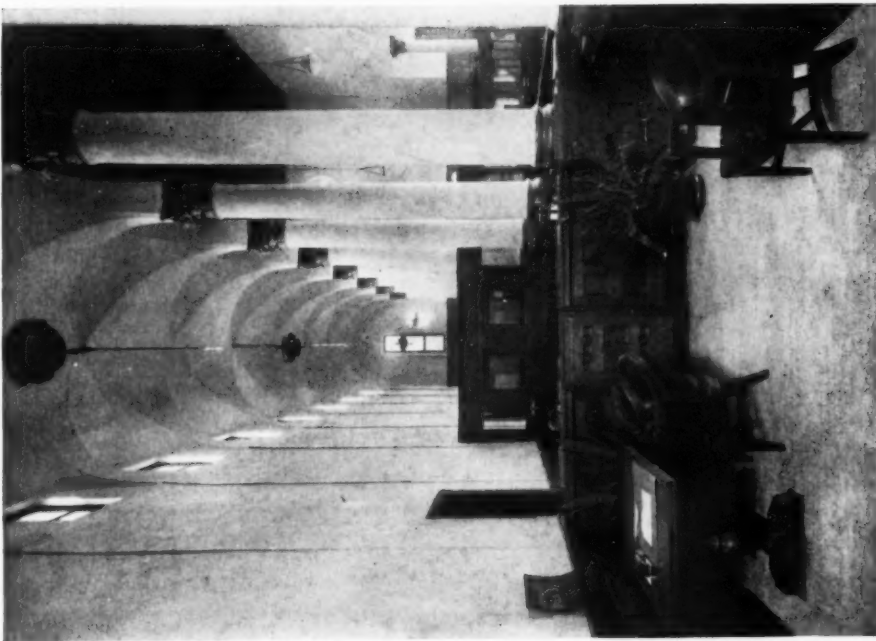
✓ SKETCH AND PLAN—COUNTY NATIONAL BANK AND TRUST COMPANY, SANTA BARBARA, CAL. MYRON HUNT, ARCHITECT; WINSOR SOULE, ASSOCIATE ARCHITECT.



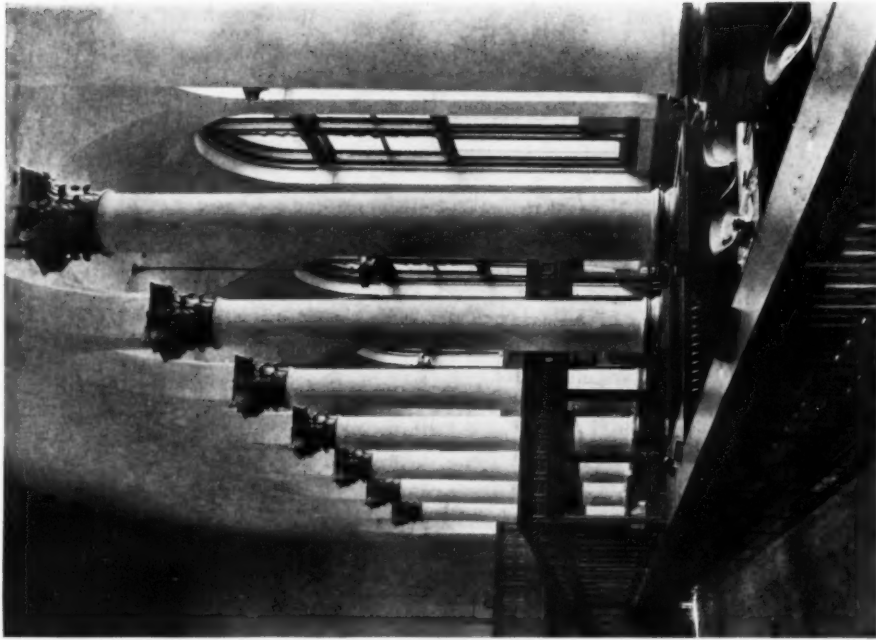
COUNTY NATIONAL BANK AND TRUST COMPANY, SANTA BARBARA, CAL.
Myron Hunt, Architect.



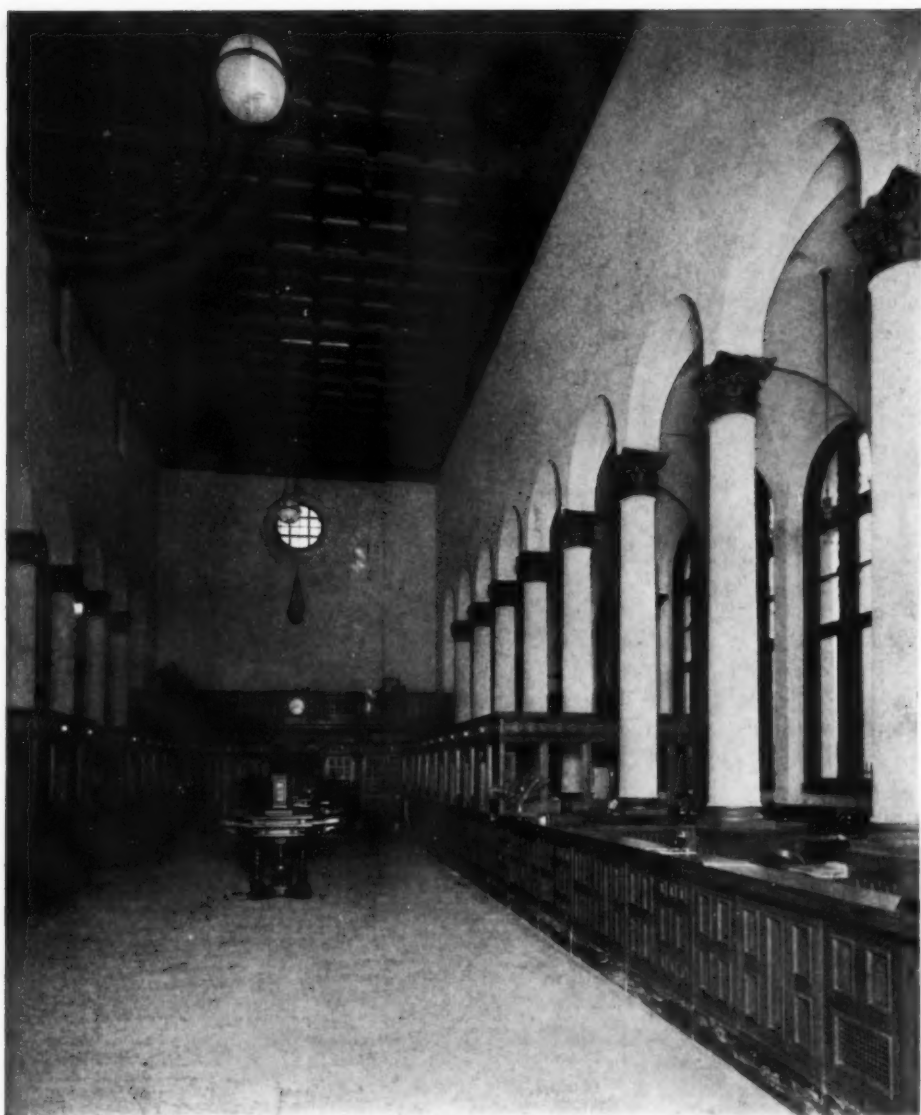
COUNTY NATIONAL BANK AND TRUST COMPANY, SANTA BARBARA, CAL.
Myron Hunt, Architect.



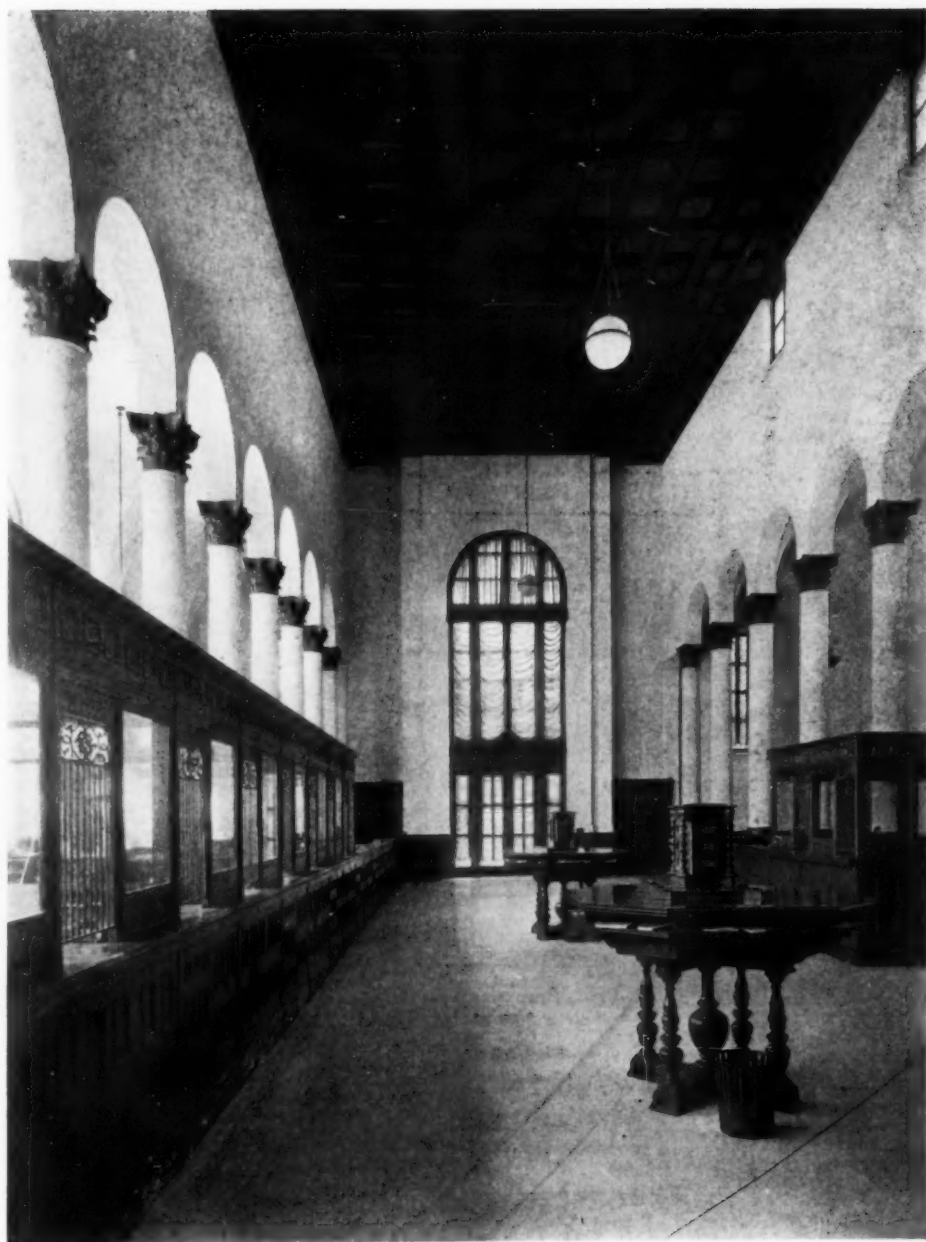
NORTH AISLE OF BANKING ROOM—COUNTY NATIONAL
BANK AND TRUST COMPANY, SANTA BARBARA, CAL.
Myron Hunt, Architect.



SOUTH AISLE OF BANKING ROOM—COUNTY NATIONAL
BANK AND TRUST COMPANY, SANTA BARBARA, CAL.
Myron Hunt, Architect.



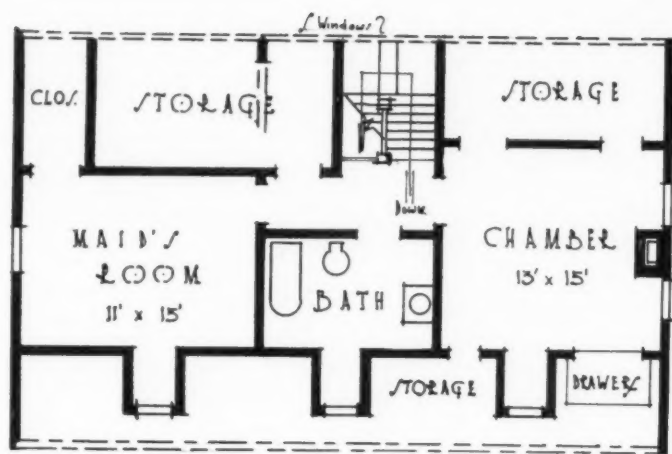
BANKING ROOM, FROM ENTRANCE—COUNTY
NATIONAL BANK AND TRUST COMPANY, SANTA
BARBARA, CAL. MYRON HUNT, ARCHITECT.



BANKING ROOM, LOOKING TOWARD ENTRANCE—
COUNTY NATIONAL BANK AND TRUST COMPANY,
SANTA BARBARA, CAL. MYRON HUNT, ARCHITECT.

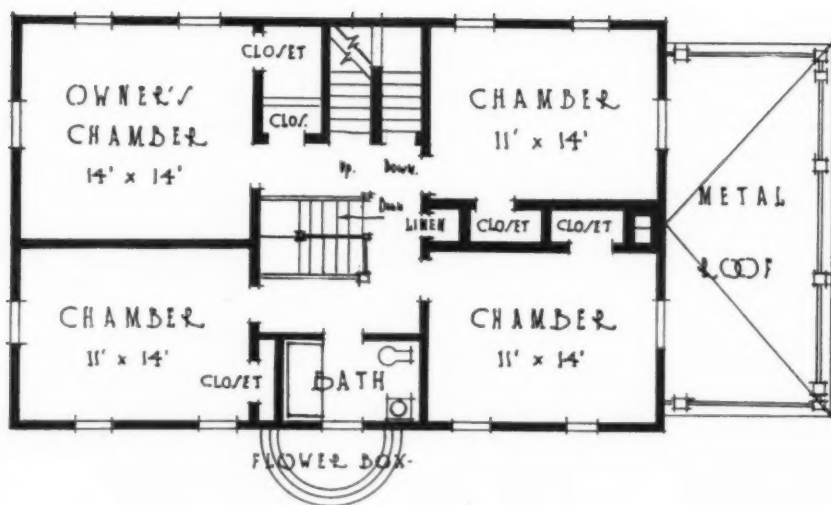


DOOR DETAIL—RESIDENCE OF MISS
E. S. CUSHING, WABAN, MASS.
GRANDGENT & ELWELL, ARCHITECTS.

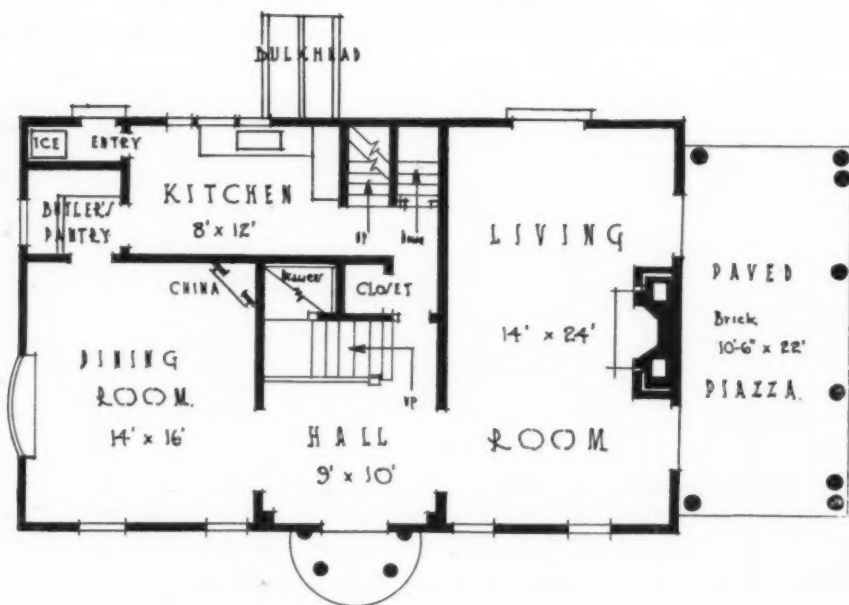


•THIRD FLOOR PLAN•

NORTH FRONT—RESIDENCE OF MISS
E. S. CUSHING, WABAN, MASS.
GRANDGENT & ELWELL, ARCHITECTS.



• SECOND FLOOR PLAN.



• FIRST FLOOR PLAN •

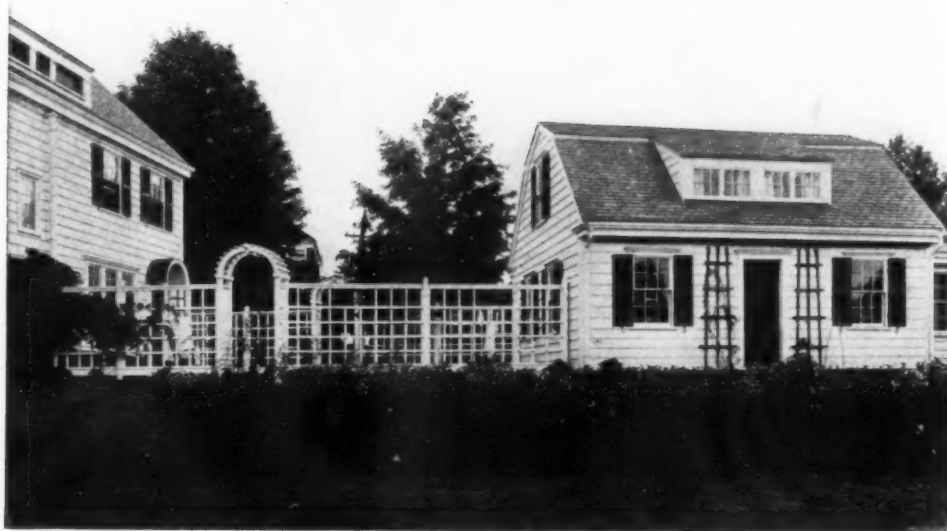
RESIDENCE OF MISS E. S. CUSHING, WABAN,
MASS. GRANDGENT & ELWELL, ARCHITECTS.



EAST END—RESIDENCE OF MISS E.
S. CUSHING, WABAN, MASS. GRAND-
GENT & ELWELL, ARCHITECTS.



REAR—RESIDENCE OF MISS E. S. CUSHING, WABAN, MASS.
Grandgent & Elwell, Architects.



TOOL HOUSE AND GARAGE—RESIDENCE OF MISS E. S. CUSHING, WABAN, MASS.
Grandgent & Elwell, Architects.

The
✓ LIBRARY BUREAU BUILDING, CHICAGO
MUNDIE & JENSEN, ARCHITECTS



By D. KNICKERBACKER BOYD

THE new Chicago building of the Library Bureau is especially designed to accommodate their main offices and to provide space for the manufacture of their card systems for general warehouse purposes. It is but a part of the complete plant, which contemplates an additional story over the rear portion and a future cabinet department building with a lumber yard and kilns.

The building is of the mill type, sprinklered. The sprinkler tank is taken care of in a most unusual and artistic manner within the tower which forms the feature of the main entrance. The tower, of fireproof construction, contains the vaults required in each story.

There are two switch tracks. One, at a platform for general receiving and shipping, combined with a city truck delivery platform and freight elevator adjacent, provides for convenient handling of mixed shipping as well as a convenient method of direct city delivery from cars

to trucks; the other track serves for coal and lumber delivery.

The main office entrance is at the base of the tower, the employees' entrance being on the side street. A garage to accommodate four trucks adjoins the main structure. The total floor area is 76,100 square feet.

The exterior of the building is of brick, with cut stone trimmings around the doorway and at other places. The fenestration, in conjunction with the brickwork, forms an unusual design, of which perhaps the most interesting feature is the complete absence of a projecting cornice, the place of which is taken by flat stone bands with brick courses.

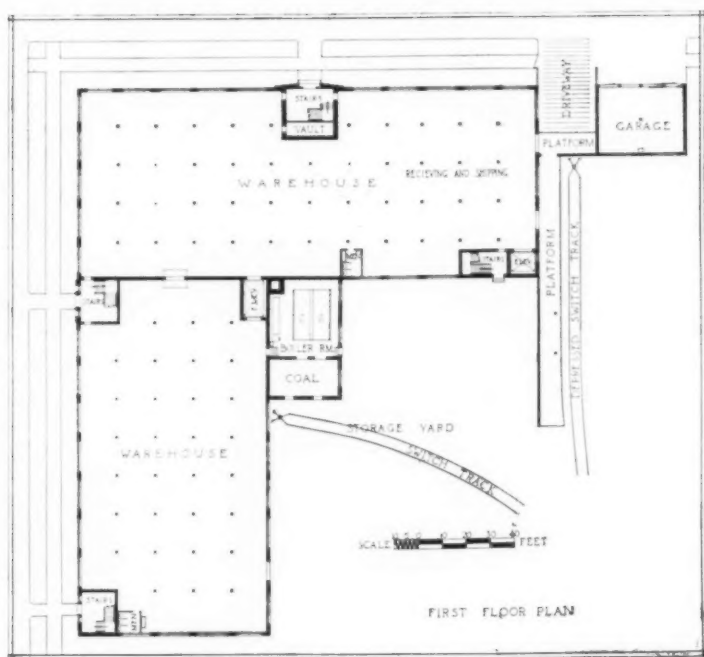
The detail of the tower, with its vertical lines accentuated by the brick courses and the arrangement of windows, combined with the use of stone bands without cornices, makes this very interesting feature the dominant one of the entire building.



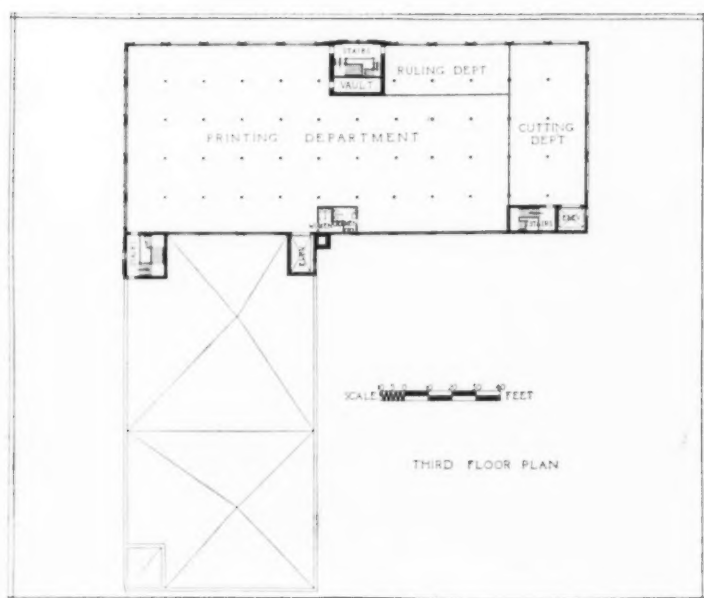
MAIN ENTRANCE—LIBRARY BUREAU BUILDING,
CHICAGO. MUNDIE & JENSEN, ARCHITECTS.



LIBRARY BUREAU BUILDING, CHICAGO.
MUNDIE & JENSEN, ARCHITECTS.



REAR VIEW AND FIRST FLOOR PLAN—LIBRARY BUREAU BUILDING, CHICAGO. MUNDIE & JENSEN, ARCHITECTS.



SECOND AND THIRD FLOOR PLANS—LIBRARY BUREAU BUILDING, CHICAGO. MUNDIE & JENSEN, ARCHITECTS.



PRESS ROOM, ON THIRD FLOOR—LIBRARY BUREAU BUILDING, CHICAGO.
Mundie & Jensen, Architects.



RULING AND CUTTING DEPARTMENT, ON THIRD FLOOR—LIBRARY BUREAU BUILDING, CHICAGO.
Mundie & Jensen, Architects.